HOMESTAKE MINING: GOLD WILL SHINE AGAIN

THE LEVERAGED BUYOUT THAT SAVED SAFEWAY

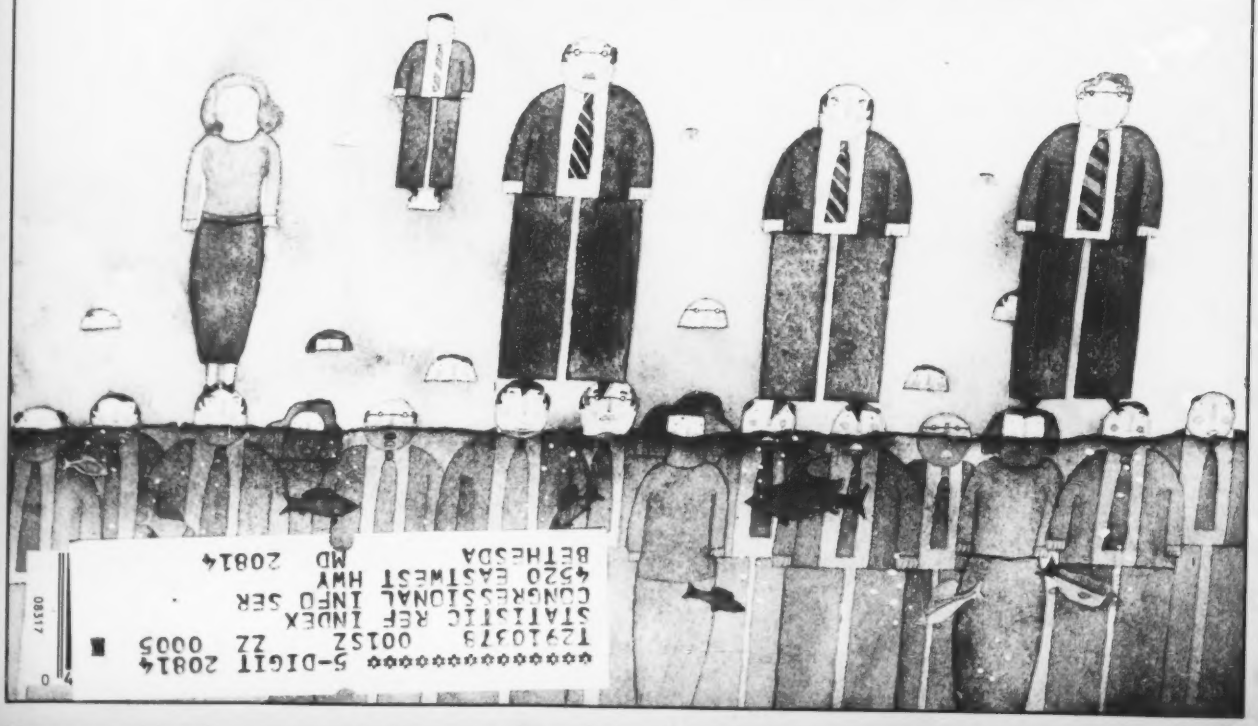
WHY WARREN BUFFETT THINKS EARNINGS REPORTS LIE

NOVEMBER 12, 1990 FOUR DOLLARS

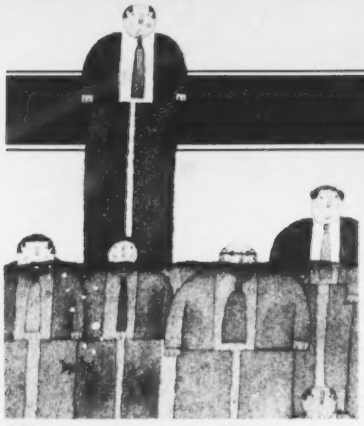
Forbes

THE 200 BEST SMALL COMPANIES IN AMERICA

HOW THE SMART ONES PLAN TO STAY AFLOAT



Forbes



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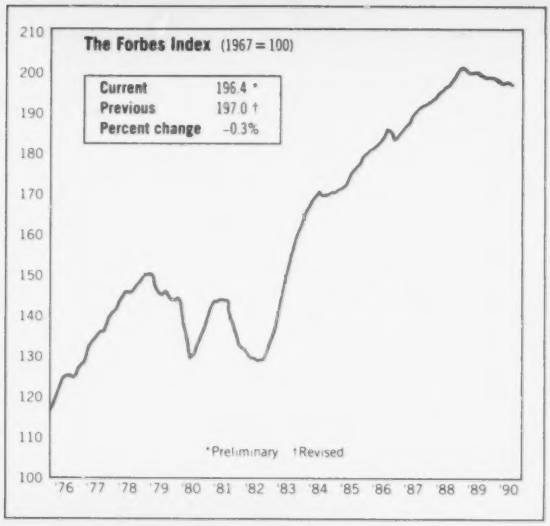
The Forbes Index



The economy is down but not out. September retail sales were up 1%; industrial production increased 0.2%. But, with higher oil prices, the U.S. trade deficit hit $9.3 billion in August. Prices were up sharply at both the wholesale and retail levels in September: the Producer Price Index up 1.6%, the Consumer Price Index up 0.8%. This marks the largest 12-month increase in the cost of living since July 1982. Initial unemployment claims rose 6%. These and other figures sent the preliminary Forbes Index for September down 0.3%, following a similar drop in August.

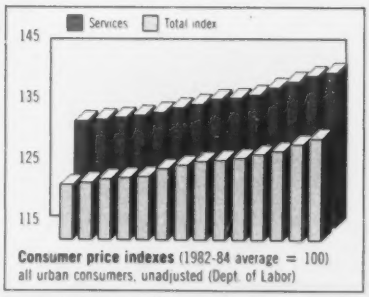
Other key rates	Source	Status
Prime rate	Chase Manhattan Bank	10.0%
Auto sales year to date vs. 1989[1]	Ward's Automotive	-4.8%
Index of leading indicators August vs. July	Dept of Commerce	-1.2%
Trade balance 12 months ended August 1990	Dept of Commerce	-$100 bil
Producer price index September vs. 1989[2]	Dept of Labor	5.9%
GNP 2nd quarter vs. 1st—annualized growth	Dept of Commerce	0.4%
NBER Experimental Recession Probability Index[3]	Natl Bureau of Economic Research	3.0%

[1]U.S.- based manufacturers, excludes imports, as of 10/10/90. [2]Finished goods. [3]August 1990.

Index Components

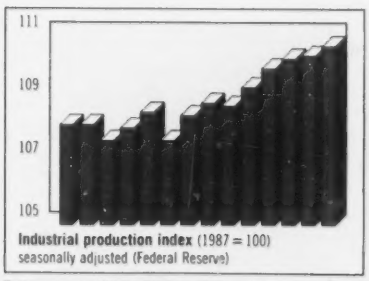
The Forbes Index is a measure of U.S. economic activity composed of 8 equally weighted elements: Total industrial production, new claims for unemployment compensation, the cost of services relative to all consumer prices, new housing starts, total retail sales, the level of new orders for durable goods compared with manufacturers' inventories, personal income, total consumer installment credit.

To measure these 8 elements, FORBES monitors 10 series of U.S. government data. The last 14 months' data for each series are presented below.

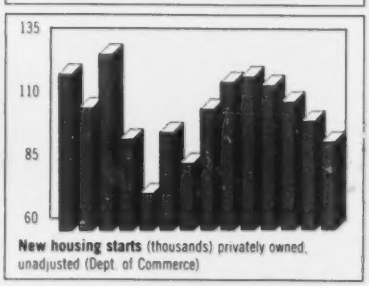


Consumer price indexes (1982-84 average = 100) all urban consumers, unadjusted (Dept. of Labor)

Manufacturers' new orders and inventories ($billions) seasonally adjusted (Dept. of Commerce)

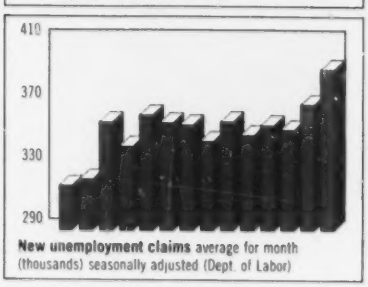


Industrial production index (1987 = 100) seasonally adjusted (Federal Reserve)

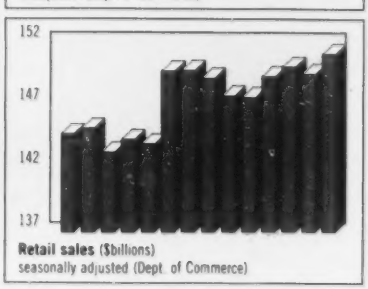


New housing starts (thousands) privately owned, unadjusted (Dept. of Commerce)

Personal income ($billions) wage and salary disbursements, seasonally adjusted (Dept. of Commerce)

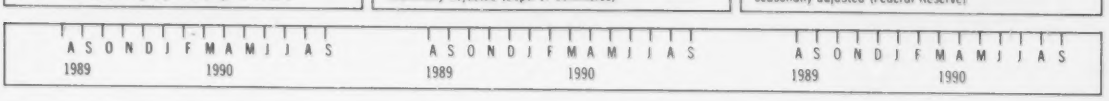


New unemployment claims average for month (thousands) seasonally adjusted (Dept. of Labor)



Retail sales ($billions) seasonally adjusted (Dept. of Commerce)

Consumer installment credit ($billions) total, seasonally adjusted (Federal Reserve)



Forbes

Brussels' Eurocrats are trying to decide whether to protect the European Community's car market, or to protect it heavily.

The unacceptable face of protectionism

By John Marcom Jr.

WILL THE STRATEGIES proposed by Jacques Calvet, the smiling fellow to the right, be adopted to fight Europe's approaching car wars? If so, that would spell bad news for anyone who thinks Europe will be a freer market after 1992.

Calvet is president of France's Peugeot S.A. With sales in 1989 equivalent to more than $30 billion, Peugeot, which also makes Citroën cars, is Europe's third-largest car company (after Volkswagen and Fiat). It earned $2 billion last year, not solely because it makes good cars, but also because France has built a thick wall around its auto market. Japanese imports are limited to 3% of France's sales of 2.3 million cars a year. In Spain, Britain and Portugal, too, the Japanese market share is limited; in Italy, where Fiat has great clout, the Japanese are capped at 1%. In countries where Japanese cars are not restricted, their market share is far higher, ranging up to 30% or 40% in small markets like Ireland or Norway.

In theory, quotas like those the French and Italians impose aren't supposed to survive the European Community's 1992 program to forge a 12-nation open market. In practice, Brussels' bureaucrats are having a hard time figuring out what to do about Japanese cars. This dithering has given Calvet and other hard-line European protectionists room to maneuver.

Last month, in Paris, Calvet laid down a protectionist agenda that was

Agnes Bonnot/Vu

Peugeot S.A. President Jacques Calvet
His protectionist agenda is tough, even for a Frenchman.

severe even from a Frenchman. Calvet's basic demand: Maintain a 10% quota on Japanese cars at least until 2002 throughout the common market, with explicit continuation of tighter limits in countries like France.

Calvet also says Japan must not build any more production capacity in Europe, period. He charges that Britain—where Nissan, Honda and Toyota have a growing manufacturing presence—is becoming a "Japanese aircraft carrier," or even Japan's "fifth major island."

In Calvet's view, it seems North America could become the sixth island: Calvet also wants to add Japanese cars built anywhere else to the quota. This could come as a shock to the people of Marysville, Ohio, from where Honda Motor Co. plans to begin shipping station wagons to Europe next year. At current rates of exchange and levels of manufacturing productivity, many models of Nissans from Tennessee and Toyotas from Kentucky would probably also be price-competitive in Europe, if the Japanese dared to bring them in.

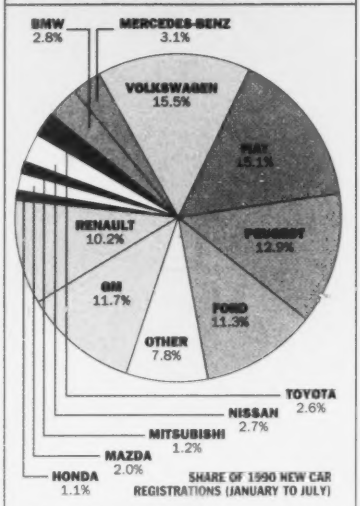
While Calvet's proposals may not carry the day, no one in Brussels is talking about free trade, post 1992, in cars. "What they [Brussels' Eurocrats] are going to do opens a new dimension of gray-area measures," says a concerned trade expert at the Paris-based Organization for Economic Cooperation & Development. "This element is strange and in many ways completely contradictory to the thrust of EC 1992."

The EC's original idea was to tell Tokyo to limit sales of cars imported from Japan for five years after 1992, reportedly to 9% of Europe's market of 13.5 million cars a year. In addition, Tokyo would agree to cap market share for its made-in-Europe cars to around 10%. The latter limit recognizes that Honda, Nissan and Toyota are investing billions to build plants, mostly in Britain, that could be making nearly 1 million cars a year by the mid-1990s. Europeans figure Americans made a big mistake in letting Japan's "transplants" capture some 20% of U.S. domestic car production.

European protection would also shield the big European operations of GM and Ford. But U.S. Trade Representative Carla Hills has already warned that EC measures "should not inhibit" sales of U.S.-built, Japanese-nameplate autos. The Eurocrats will probably rely on complicated assessments of "local content" to decide what's Japanese and what isn't. But is a Rover with a Honda engine British? Are Fords built by Mazda in Michigan American?

A big enough slice

Quotas in some markets have kept Japan's slice of Europe's car market to about 10%. Many in Europe figure that's plenty.



Source: Volkswagen Group

Why do Europeans, who have had years to watch Japan's carmakers invade the U.S. and to revamp their plants, resist so stubbornly freer trade in cars? Because they still have much to lose. James Womack, Daniel T. Jones and Daniel Roos, authors of a study on the auto industry's future (published as *The Machine that Changed the World*, Rawson Associates, $22.50), doubt more protection is the solution but make it clear that closing the market has a certain rationality. Europe's carmakers, they write, "are much farther behind [the Japanese] than the Americans were in 1980—off the pace by a factor of three or four in many countries in terms of fundamental productivity."

Rolling out this fall, as if to fuel rivals' fears, is the British-built Nissan Primera. It has been hailed by motoring critics as Nissan's first credible challenge to midmarket stalwarts like Ford's Sierra or Peugeot's 405. Nissan ads running in European English-language newspapers and magazines hail a "performance car built for the country called Europe."

But will there be a country called Europe? Not if Jacques Calvet and the continent's other hard-line protectionists carry the day. And that's a pity. A cartelized, walled-off European auto industry would deal a self-defeating blow to the world's trading system, and strike a disturbing counter note to the ebullience and euphoria that has been the theme, until lately, of 1992. ■

Sometimes the best relationships are based not on marriage but on living together. Consider Inland Steel's profitable coupling with Nippon Steel.

Don't merge, joint venture

By Steve Weiner

THIS PAST APRIL, Inland Steel Industries' future began flowing out the door of its new cold-rolling mill. The 200-acre plant, called I/N Tek, is in New Carlisle, Ind., about 65 miles east of Inland's Chicago headquarters. The plant is 60% owned by Inland, with the balance held by Nippon Steel Corp., the world's largest steelmaker.

Steel coils an eighth of an inch thick and 65 inches wide come in one end of a 3-mile-long line and are welded into a river of steel that, at the opposite end, has been flattened, shaped, cleaned and treated to precise customer specifications. The premium-quality steel can be used in every-

Many of the firms on this year's list of the 200 Best Small Companies are taking a contrarian stance when it comes to managing their businesses in next year's uncertain economic climate. As the recession builds, those companies with the least leverage on their balance sheets are talking opportunity.

Bring on the flood

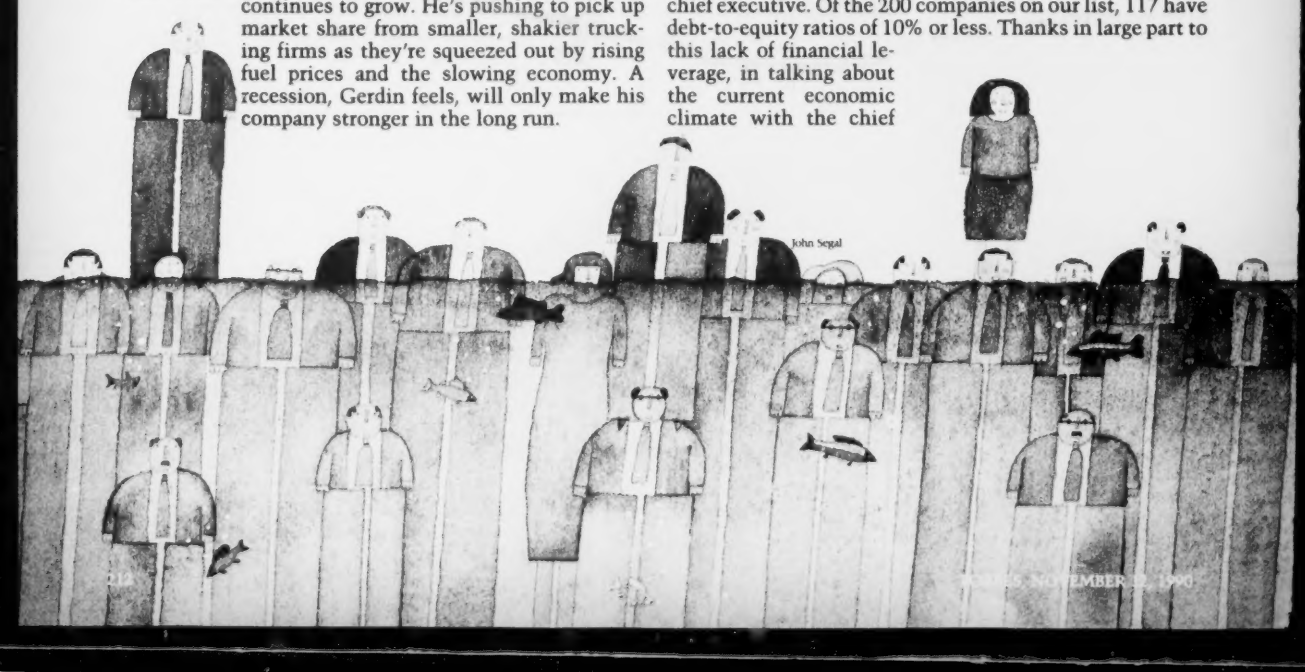
By Fleming Meeks

RUSSELL GERDIN HAS NEVER believed in carrying long-term debt. "In good times, maybe we don't look so smart," says the chief executive of Coralville, Iowa's Heartland Express, a $48 million (1989 revenues) trucking firm. "But now we do." In fact, Gerdin, a 25-year veteran of the trucking industry, has looked pretty smart to FORBES in good times and bad since his company went public in 1986. His conservative fiscal strategy has helped land Heartland on our list of the 200 Best Small Companies in America four years in a row.

And even as the economy staggers, Gerdin's business continues to grow. He's pushing to pick up market share from smaller, shakier trucking firms as they're squeezed out by rising fuel prices and the slowing economy. A recession, Gerdin feels, will only make his company stronger in the long run.

Which isn't to say that the 49-year-old Heartland chief is taking a glib view of the economic downturn. While major customers like Kellogg Co. and Whirlpool Corp. continue to give him steady business, Gerdin is playing things cautiously. Instead of placing a new order for trucks in October—he had planned to increase his 525-truck fleet by 20%—he's waiting until December to see how well business holds up in the fourth quarter.

Heartland Express, ranked 23rd on our list of the 200 Best Small Companies in America, is hardly alone, in either its pristine balance sheet or the optimism of its chief executive. Of the 200 companies on our list, 117 have debt-to-equity ratios of 10% or less. Thanks in large part to this lack of financial leverage, in talking about the current economic climate with the chief



executives of over two dozen of the top Up & Comers, one word—"opportunity"—kept coming through.

Take Francis Reed, chairman of Boston Acoustics, in Lynnfield, Mass. Ranked 51st on our list, Boston Acoustics (fiscal 1990 revenues, $26.5 million) makes high-quality stereo speakers. That's a tough business to be in when consumers start cutting back spending. But while Reed is quick to concede that specialty hi-fi products "are the leading edge of discretionary purchases," revenues and profits at Boston Acoustics are up 20% through the second quarter of fiscal 1991.

How has he managed that? Reed says he learned a few lessons from the 1981-82 recession that he began reapplying last year.

Reed, 57, founded Boston Acoustics in 1979, after being fired, following a dispute about strategy, as vice president of sales and marketing at Advent Corp., the now-defunct maker of speakers and big-screen TVs. In 1981 he noticed that competitors, including his former employer, were increasing wholesale prices to compensate for lower sales volume. Reed countered by dropping wholesale prices on average by 10% and bringing out a surprisingly high-quality pair of $150 (retail) speakers. (His original product was a $750 pair of speakers.)

With a nasty recession on, stereo stores, which were struggling to sell high-priced speakers, immediately opened up shelf space for the Boston Acoustics line. The company's revenues jumped over 60% in fiscal 1982, to $5.6 million, and profits rose nearly 40%, to $337,000. Since then, the company has grown at a 22% compounded rate, and net margins have doubled, to over 12%.

"What market share you gain in adversity," notes Reed, "you maintain when things turn around."

As the current recession builds, Reed, who began noticing a softening of orders for the company's car stereo speakers (over one-third of revenues) in mid-1989, is attacking on several fronts. Since last fall he has sped up the introduction of new products to try to win favor with retailers, introduced an inexpensive ($150 a pair) line of speakers and offered lucrative financial incentives to his rep firms to increase sales.

Like Heartland Express, Reed's Boston Acoustics has appeared on our list every year since going public in 1986. Also like Heartland, Boston Acoustics is debt-free. "In good times, cash is not a commodity that is so expensive," says Reed, whose company is sitting on a $6.5 million cushion of cash and securities. "But right now, when you've got cash, you can get better delivery dates, and you can get products at cheaper prices. You have more command of the supply side of your business than in real great times."

Even in the mid-1980s, when leverage was king, the best small companies steered clear of borrowing. In 1988, at the peak of the borrowing frenzy, 106 of the companies on our list were virtually debt-free. One should, of course, remember that there is a tautological aspect to this argument: In compiling the 200 Best Small Companies list, our statisticians screen out companies with more debt than equity. As a result, we've never tracked highly leveraged small companies, figuring it is quite an achievement to produce a consistently high return on equity without resorting to heavy debt.

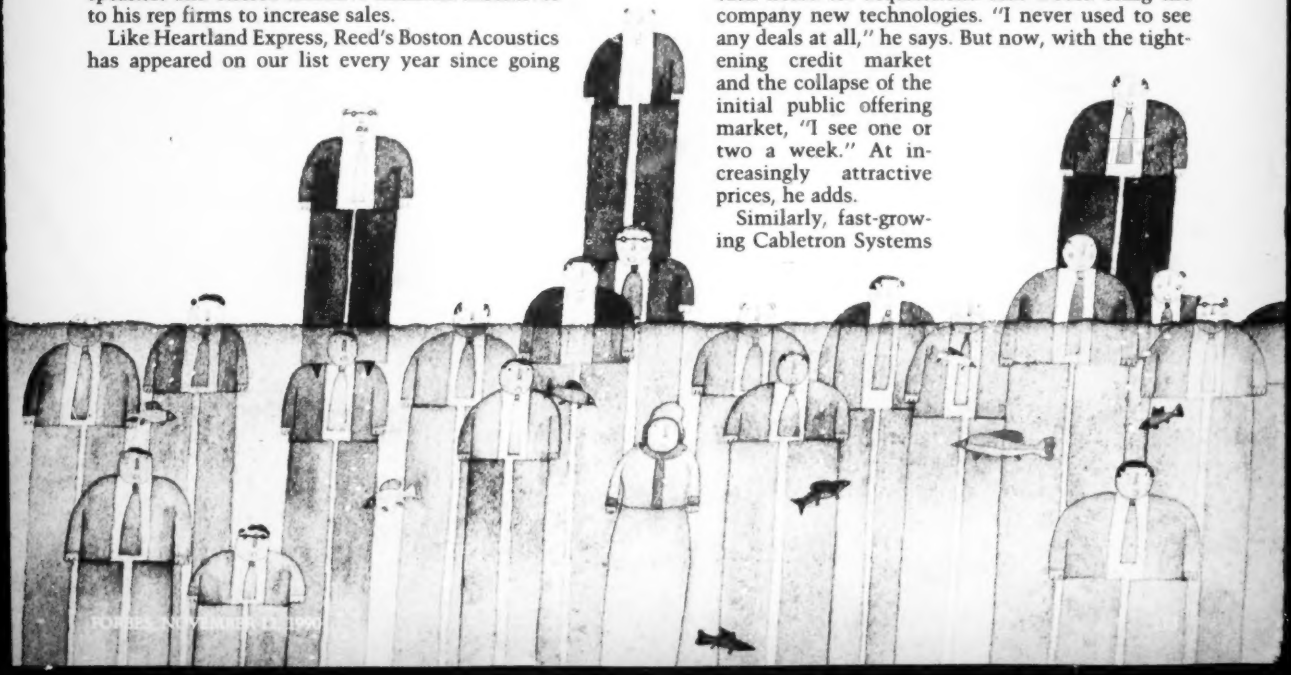
None of the chief executives we spoke to said they were thinking of borrowing more to take advantage of down-cycle opportunities. John Adler, chief executive of Milpitas, Calif.-based Adaptec, Inc., is a good example. Adaptec, number 178 on our list, is a maker of microchips and computer boards that control the input/output functions of high-performance microcomputers and peripherals. Since taking over the helm in 1985, Adler has carefully pared back the company's debt load. Says he: "We're technologically aggressive and fiscally conservative."

With $2 million in long-term debt and $52 million in cash and securities, Adaptec, which earned $13 million on revenues of $109 million in fiscal 1990 (ended Mar. 31), has stepped up research and development from 9.2% of revenues last year to a current 10.5% of revenues.

"That's where we want to bet the farm," says Hungarian-born Adler, 53, who spent 22 years with IBM and Amdahl Corp. before coming to Adaptec. "We're willing to pay almost any price for a quicker time to market."

Adler is also considering using some of his substantial cash hoard for acquisitions that would bring the company new technologies. "I never used to see any deals at all," he says. But now, with the tightening credit market and the collapse of the initial public offering market, "I see one or two a week." At increasingly attractive prices, he adds.

Similarly, fast-growing Cabletron Systems



Bottom-fishing opportunities?

Here are 20 underleveraged companies from our list whose stocks have been hit the hardest in recent weeks. Will they bounce back stronger than their competitors?

Company	Stock price 8/1/90	Stock price 10/12/90	% chg	Est 1990 P/E
Penn Treaty American	23½	10	–57%	5.1
Adaptec	19⅛	9⅝	–50	5.0
MBIA	39⅝	20	–50	5.9
Adobe Systems	35½	18¾	–47	10.7
Cadence Design Systems	27⅞	14¾	–47	11.7
Home Nutritional Svcs	20⅛	11¼	–44	13.2
Nellcor	17⅝	9⅞	–44	8.4
Sierra On-Line	21	12¼	–42	7.4
GZA GeoEnvironmental Tech	10¼	6	–41	7.4
Analysts Intl	19½	11½	–41	7.9
Rollins Environmental Svcs	13	7¾	–40	16.5
Electronic Arts	12⅞	7¾	–40	8.6
System Software Assocs	23¼	14	–40	10.2
Harleysville Group	24	14½	–40	4.6
New Line Cinema	11¾	7⅛	–39	7.1
SafeCard Services	9⅞	6	–39	6.4
Melamine Chemicals	13¾	8⅜	–39	6.0
Technalysis	13¼	8¼	–38	8.5
Tennant	44	27⅞	–37	9.1
Medstat Systems	14½	9¼	–36	17.8

Sources: William O'Neil & Co.; Institutional Brokers Estimate System via Lotus One Source.

in Rochester, N.H. is pushing R&D hard. Founded in the proverbial garage in 1983, Cabletron, a manufacturer of local area network equipment and the number two company on our list, earned $22 million on revenues of $105 million last year. And an $84 million public offering last year more than wiped the debt off the balance sheet.

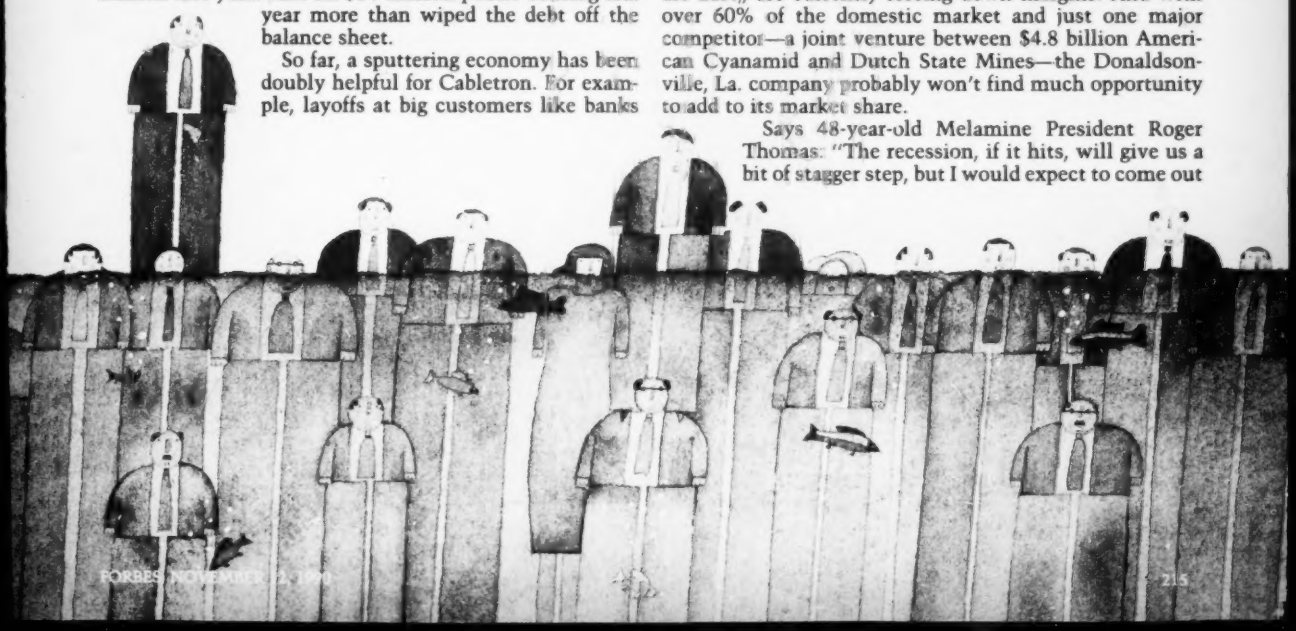
So far, a sputtering economy has been doubly helpful for Cabletron. For example, layoffs at big customers like banks actually can be good for business, as banks turn more to electronic networks to increase the efficiency of their pared-back staffs. And Cabletron has also gotten a boost from the uncertainty in recent years at Boston-area high-tech firms like Apollo Computer, Wang and Digital Equipment. Why? Because a number of engineers have chosen to jump to the upstart firm rather than face potential layoffs. Cabletron's 32-year-old chief executive, Robert Levine, almost gloats when he says: "The demise of the Massachusetts economy has been a tremendous benefit to us."

But then, like many of the upstart high-tech firms that grew rapidly through the last recession—only to flame out later—Cabletron need worry less about the current economy than managing its growth into the next stage *(see story, p. 226).*

Not every company we rank will prosper from a recession. Some will fall victim to their own missteps, while others will simply try to weather the storm. Melamine Chemicals, for example, the number one company on our list, might well see a falloff from its remarkable performance (five-year average return on equity of 167%). In fiscal 1990 (ended June 30) this little 82-employee company earned $7.6 million on revenues of $38 million.

Its product: a urea-based chemical called melamine used in automotive paints, appliance enamels and Formica, among other things. Lagging car sales and housing starts, combined with the higher price of raw materials (some of which are imported from the Middle East), are currently forcing down margins. And with over 60% of the domestic market and just one major competitor—a joint venture between $4.8 billion American Cyanamid and Dutch State Mines—the Donaldsonville, La. company probably won't find much opportunity to add to its market share.

Says 48-year-old Melamine President Roger Thomas: "The recession, if it hits, will give us a bit of stagger step, but I would expect to come out



much stronger." Thomas is counting on increasing use of his product as a flame retardant to pick up the slack demand by the middle of next year.

Number 167-ranked International Aluminum Corp., a maker of aluminum doors, windows and other building products, is already feeling the effects of a softening economy. The Monterey Park, Calif.-based company's revenues declined from $221 million in fiscal 1989 (ended June 30) to $212 million in fiscal 1990. Says 75-year-old Chief Executive Cornelius Vanderstar, "We're working hard to maintain our position in the market. And when the upturn comes, we'll be fired up to go." Vanderstar, whose company has only $3.4 million in long-term debt and $13.5 million in cash and securities, is also looking around for acquisitions, though he may hold off a bit longer; he expects prices have further to fall before the housing market turns around.

Juno Lighting, based in Des Plaines, Ill. and ranked 44th on our list, will most likely see a slowdown as well. But the $76 million (1989 revenues) manufacturer of commercial and residential lighting isn't battening down the hatches. Like Francis Reed at Boston Acoustics, Juno Chief Executive Robert Fremont says he'll use the lessons he learned from the 1981-82 recession as a guide.

"We introduced more products in 1982 than we had in the prior three or four years," says Fremont. "And the end result was that in 1983 and 1984 we went wild." The numbers bear him out. After an almost flat year in 1982, with revenues of under $15 million, Juno's sales jumped to $32 million in 1984. Profits jumped from a 1981 high of $1.8 million to $4.5 million.

Hoping the current recession will also end in strong cyclical growth, Fremont has been stepping up the introduction of new products and beefing up promotional spending. Fremont, whose company has $4 million in long-term debt and $27 million in cash and securities, not surprisingly volunteers that his plan is to "take advantage of the weaknesses of our competitors and to try to take market share." Through the first nine months of fiscal 1990, Juno's sales and earnings are up over 10%.

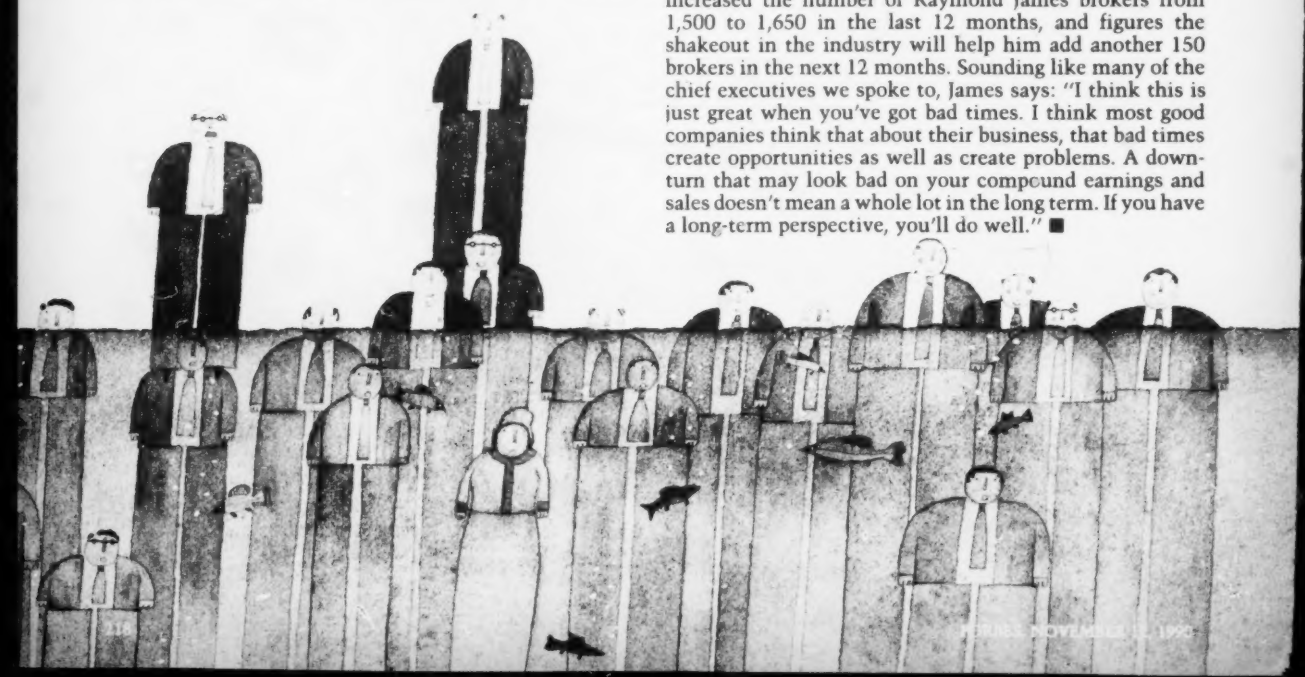
While most of the companies on our list are well positioned to survive and thrive, the stock market has punished the group much harder than the Standard & Poor's 500. In fact, they've done no better than the over-the-counter market as a whole. Between Aug. 1, the day before Saddam Hussein's invasion of Kuwait, and Oct. 12, when we priced the shares of the companies on our 200 best list, their value had fallen 25%—the same as the Nasdaq Composite Index of just over 4,000 mostly small companies. The Standard & Poor's 500 had dropped 15.6%.

This hardly seems fair, given the past performance of the top small companies. An analysis last year of the ten-year performance of the top 100 companies on our 1979 list revealed that they had outperformed the market by 73%. A $10,000 investment in each company—$1 million altogether—had grown to $4.8 million, while $1 million invested in the Standard & Poor's 500 grew to $3.2 million. If the current recession does not become a depression, there are probably plenty of enticingly undervalued opportunities on our list *(see table, p. 215)*.

That is certainly the feeling of Thomas James, chief executive of the St. Petersburg, Fla.-based brokerage Raymond James Financial, Inc., the 153rd-ranked company on our list. "I like times like these," says James. "They create good investment opportunities in the marketplace, and they get rid of a lot of the chaff in the industry. They make you focus on the basics."

Raymond James, which has a five-year compounded growth rate of over 30%, earned $12.4 million last year on revenues of $226 million. That's a net margin of 5.5% in an industry that averaged margins of 3% last year. Clearly, that kind of growth will be impossible to sustain in the current down market. Says James, candidly: "I don't know whether you're going to be giving me a call next year to ask me what we're doing to be one of the your best 200 small companies or not."

But then, James doesn't manage his business in order to make any lists. Looking to the end of the recession, he has increased the number of Raymond James brokers from 1,500 to 1,650 in the last 12 months, and figures the shakeout in the industry will help him add another 150 brokers in the next 12 months. Sounding like many of the chief executives we spoke to, James says: "I think this is just great when you've got bad times. I think most good companies think that about their business, that bad times create opportunities as well as create problems. A downturn that may look bad on your compound earnings and sales doesn't mean a whole lot in the long term. If you have a long-term perspective, you'll do well." ■



Bland as grits, steady as molasses—this is the homespun Texas story behind Luby's Cafeterias. Fast, cheap and no tipping.

The best little hash house in Texas

By William P. Barrett

DOWN SAN ANTONIO WAY there's an outfit called Luby's Cafeterias. The company grosses $311 million annually and runs 140 eateries, mainly in the Southwest. Nothing north of Oklahoma or west of Phoenix, and only one east of Little Rock. Some 80% sit in Texas, starting with the one a cannon-shot away from the mighty Alamo.

Cafeterias are a regional business. They aren't all that hot up North, where the clientele prefers sit-down waiter service. But down South cafeterias are quite popular, even with affluent customers. The food comes fast, it's cheap, and there's no tip to add to the bill. Texas and environs are full of both stand-alone cafeterias and such well-known chains as Morrison's, Furr's/Bishop's and Piccadilly. Each of these three chains, in fact, has more outlets than Luby's.

But none cuts a fatter hog. Since 1980 Luby's has generated a very smart five-year return on equity of 18.7%, earning the best little hash house in Texas the number 93 spot on this year's list of the 200 Best Small Companies in America. Luby's larger publicly traded cafeteria rivals average just under 15%. Its 10%-plus net margin is nearly three times that of these rivals. Luby's performance over time is especially amazing considering that the Texas economy for a while was lower than a snake in a wagon rut.

Sure, the shares, listed on the Big Board, have been dead in the water of late. But whose shares haven't? Still, at a recent 17½ a share, Luby's is trading at a slightly expensive 13½ times next year's expected earnings. But a big-time recession won't swamp the company in interest payments because it has no debt to speak of.

The honchos at Luby's—Chairman John Lahourcade and Ralph (Pete) Erben, president and chief executive—take a lot of pride in what they admit is a dull kind of business. "Our growth has been very steady," says Erben, 59, an ex-teacher who's been with the company since 1960. He served 18 years as a cafeteria manager before going corporate. He just took over the chief executive slot from Lahourcade, 65, who's winding down after 20 years with the company.

The irony at Luby's is that the person for whom the company is named, Harry Luby, was a transplanted Yankee. A Chicago native, he opened his first buffet-style lunchroom in Springfield, Mo. in 1911, with the unlikely moniker of New England Dairy Lunch. Two years after Harry moved to San Antonio, the first cafeteria flashing the Luby's name debuted in Dallas in 1929. As recently as 1980 the company had only 56 locations—only 2 outside Texas. During the

Executives Ralph Erben (left) and John Lahourcade ***Slicker than peeled cucumbers.***

1980s the company expanded rapidly, mainly using internal cash flow.

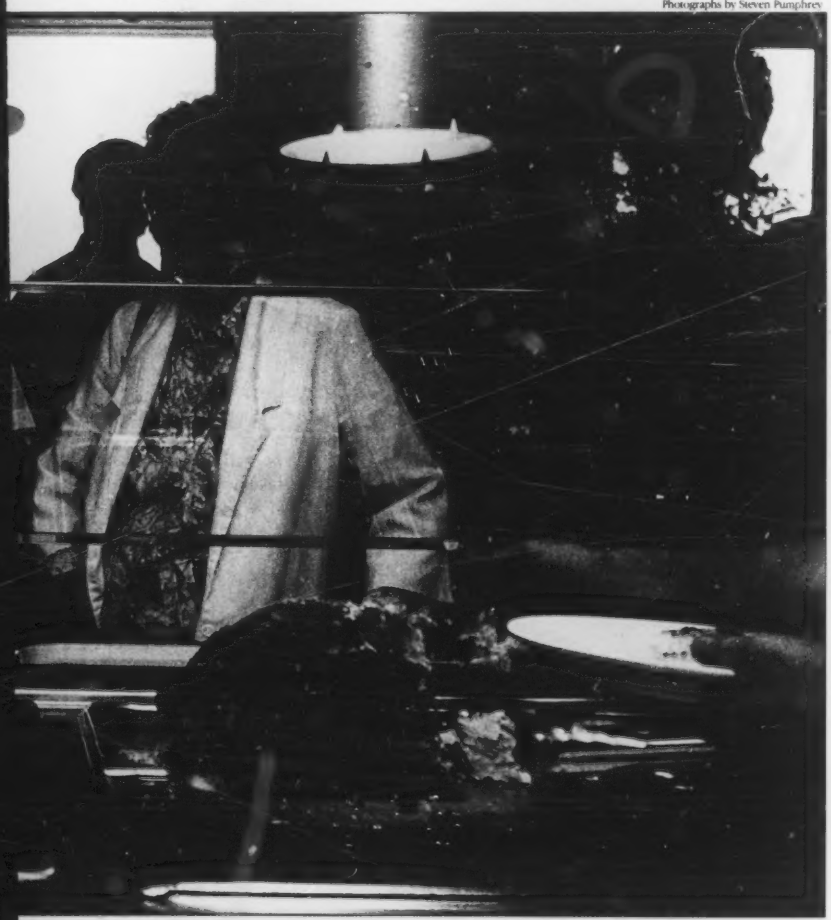
Nowadays, a typical Luby's is situated just off the freeway in the suburbs. It offers a large lunch and dinner menu; breakfast, Erben sniffs, just doesn't pay. The serving line contains more than 20 salads, 12 to 15 entrées, a dozen or more side orders of vegetables and maybe two dozen desserts—all made on the premises.

You have to be slicker than a peeled cucumber to squeeze out nice margins on an average meal tab of only $4.92. At Luby's, one way is by forking out only a half a cent per dollar of sales on advertising and promotion, compared with more than 6 cents for McDonald's. Folks know Luby's, and word of mouth doesn't cost a dime above preparing quality meals at convenient locations. In San Antonio they say you have to beat the Baptists out of church on Sunday to get a seat at Luby's.

The biggest factors behind Luby's success are clearly the individual cafeteria managers. Their income is totally profit-sharing. Base salary is zero; each gets 20% to 25% of a location's operating profits. Last year managers averaged $124,000. Vested with wide authority, they actually buy much of their own wholesale supplies rather than going through a central warehouse. Each cafeteria's inventory lasts for less than four days, well under the industry average.

Managers can also alter the menu as needed to meet local tastes. The Mexican food popular in San Antonio might not be stressed as much in, say, Oklahoma City. The outlet in Houston's swish Galleria shopping district is big on soup and salad. Managers are also free to curry local favor, perhaps by opening the shop in the morning to serve a free breakfast for the Rotary.

Photographs by Steven Pumphrey



Patrons in the serving line at a newer Luby's Cafeteria in San Antonio
Good margins on an average meal check of just $4.92.

Would-be managers, many fresh out of college with no food experience, work their way through the ranks. First they go through a company boot camp in San Antonio. They become salaried assistant managers and move around a lot. Next rank in the pecking order is associate manager, where they get about 10% to 12% of the local profits. If they cut it, they eventually get their very own outlets to manage.

These entrepreneurial managers know they must get the best employees and work to keep them. Compared with the restaurant business in general, turnover of Luby's nonmanagerial workers is low. One customer at the Luby's in the fashionable San Antonio enclave of Alamo Heights says the same lady has been pouring his iced tea for more than a decade. Same faces breed familiarity and repeat business.

Erben continually searches for new locations, especially when a cafeteria hits about $3 million in sales; that's a signal to him the area can support a new cafeteria. At Luby's, same-location sales in recent years have been flatter than west Texas and actually dropped 1% last year, despite efforts to develop a take-out business. But that doesn't much trouble Erben. He likes to open locations not too far from existing ones, to take advantage of that neighborly goodwill.

Erben hopes to open 14 new Luby's this year. One is going up right now very near Houston's fancy River Oaks neighborhood, home to a slew of The Forbes Four Hundred. "Affordable land, an excellent location," he says. The rich know how to stay rich. They eat cheap.

Someday, Erben figures, Luby's will invade the North. His route will probably be through the Midwest, parts of which have something of a cafeteria tradition and where snowbird retirees who winter in Texas will provide some of that free word-of-mouth. But first it will expand laterally. Last year Luby's hoofed into Florida. "Good cafeteria country," says Erben.

One thing's for sure. Erben and his crew don't try to throw a wide loop with a short rope. They do try to stick to what they know, and so far have done that brilliantly. ■

How Johnson Worldwide Associates has thrived selling distinctive sporting goods by stressing technology and lots of marketing.

More fun than selling floor wax

By Rita Koselka

FOR SHEER EXCITEMENT, there's nothing quite like the annual Crappie tournaments sponsored by Johnson Worldwide Associates, a Racine, Wis.-based maker of fishing equipment and other recreational products.

The crappie, as everyone knows, is a pan fish found lurking mainly in lakes in the central U.S. Each year JWA tags the fins of some 8,000 crappies and releases them in 42 lakes across the country. Each tag is worth a prize. The lucky angler who hooks one of the 42 fish tagged "Tanglefree Tom"—named after one of JWA's popular fishing reels—with a Johnson reel also hauls in $65,000.

This summer one sportsman snagged a Tanglefree Tom, and Terry Malone, 60, JWA's chief executive, couldn't be happier. It's just more favorable and relatively inexpensive marketing for the $232 million (1989 sales) company. JWA is number 47 on our Best Small Companies list, with a return on equity of 23% over the last five years.

Malone's strategy has been straightforward—find distinctive products, mostly in sporting goods, in obscure market niches, improve the technology, and market them aggressively. And JWA has found some pretty obscure niches: electric fishing motors; lightweight plastic canoes, tents and other camping equipment; scuba gear and swim fins; pre-inked hand stamps to replace the rubber stamps and ink pads found in almost every office.

Despite its product roster, JWA's performance has been far from quirky. Earnings grew a sprightly 14.3% last year, fed largely by new acquisitions. Like the other companies on our list, JWA has a strong balance sheet and over the last few years has aggressively paid down debt that it took on when it was spun off from S.C. Johnson & Son, the wax people, in 1986.

Bob Mahoney

Tentmaking at the former Johnson Wax unit
Developing distinctive products in niche markets.

In the early 1970s Johnson Wax was sucked in by the diversification fad and decided to build a recreational products division, based in part on the fact that the president, Samuel C. Johnson, was an avid sportsman. Johnson first bought a small fishing reel and electric motor manufacturing company based in Mankato, Minn. Though the division grew and prospered, it had difficulty competing for resources with the more powerful and profitable consumer and institutional products groups within privately held Johnson Wax.

By the mid-1980s Johnson had concluded that the leisure products group would function better as a separate company. In 1986 the family did a leveraged buyout for $66.7 million to take the division—renamed Johnson Worldwide—out from under the S.C. Johnson & Son mantle. A year later, providentially one week before the Oct. 19, 1987 market crash, JWA went public, selling 28.5% of the company for $15.50 a share, raising $25 million, which was used to pay down debt. A second offering of another 10.3% of the common followed ten months later. The stock recently traded for around 20 a share. The Johnson family's stake is 42%, although it has voting control of 72%.

JWA expects to earn over $15 million in 1990, on sales of more than $260 million, or nearly $2 a share. The original electric fishing motor company, Minn Kota Motors, which the company bought in 1970, now has sales of more than $80 million and about 70% of its market.

Other market leaders owned by JWA include Old Town canoes; Scubapro, a premium manufacturer of scuba equipment; and Plastimo, a major European maker of compasses, anchors and

Johnson Worldwide Associates' Terry Malone
Looking overseas for new markets and products.

other sailing gear.

Once he finds a small private company to purchase, Malone, who spent 28 years at Johnson Wax before taking over the recreational products group, tries to plug it into IWA's longtime distributors—including L.L. Bean—gives it money for product development and advertising, and lets it grow.

Last December, for example, IWA acquired Mitchell Sports, S.A., a fishing reel manufacturer based in Cluses, France. Mitchell is revered by serious U.S. fisherman for developing the Mitchell 300 reel in the early 1950s. But the company hadn't capitalized on the enormous popularity of that reel in the U.S. by associating its other products—including rods and other types of reels—with the famous older reel. So IWA has developed television commercials, new brochures and point-of-purchase displays to roll out an updated version of the Mitchell 300 reel.

IWA pumps about $5 million a year into research and development to keep distinctive new products coming. Its researchers spent eight years developing a new molded plastic composite for a relatively inexpensive, nearly indestructible canoe. And the fishing lure division has just come out with a processed-bait product made largely from real fish parts.

In addition, IWA cross-fertilizes its holdings by passing around new ideas and technologies among the units. Just introduced this year, for example, is an automated fishing motor that keeps one's boat putting along in a preprogrammed direction. That technology was borrowed from the marine products unit, which makes a similar product to guide large sailboats.

Like many of FORBES' best small companies, IWA is looking abroad for new growth—particularly in Europe and the Pacific Rim, where American camping and fishing products have a special cachet. It's also looking to expand by picking up new product lines. Malone is an avid skier. So don't be surprised if IWA's next acquisition involves a product that works well on the slopes. Followed, no doubt, by a ski tournament with big prizes. ■

Cabletron Systems' founders have built a very successful company. But their greatest challenges are still ahead of them.

Work in progress

By Ignatius Chithelen

CABLETRON SYSTEMS Inc. was actually started in a garage. That was seven years ago, in Rochester, N.H. Since then, the manufacturer of local area network equipment has grown into a $105 million (sales) operation that, in fiscal 1990 (ended Feb. 28), earned a remarkable $22 million. Its two still-young founders are both paper centimillionaires.

And its performance over the past five years—average return on equity of 52%—has landed Cabletron in the number two spot on our list of the 200 Best Small Companies in America.

But as the rise and fall of dozens of high-flying computer companies in the early Eighties instructs, Cabletron's greatest challenge almost certainly lies ahead.

The story starts in March 1983, when Craig Benson, then 28, and Robert Levine, then 25, started the company in Levine's Ashland, Mass. garage. Levine, an independent sales rep who sold wire and cable, had a customer who wanted 1,000 feet of specialized cable for wiring up a computer network.

Levine couldn't convince his supplier to sell him cable in lengths of less than 10,000 feet. Enter his friend and sometime customer Benson, a materials manager at Interlan, a supplier of local area network equipment. (Such networks connect personal computers so they can all share information and printers.) Benson convinced his friend that, among their various contacts, they could quickly unload the other 9,000 feet and double their money in the process.

So they bought 10,000 feet of cable for $30,000 in trade credit and hauled it to Levine's garage. There, during a lunch break, they cut off a 1,000-foot section to meet the order. They soon found customers for the remaining 9,000 feet of cable—and more. The two lads were in business.

Within a year, with Levine doing the selling and Benson handling the financial side on evenings and weekends (he didn't leave his Interlan job until late 1984), the company had ten part-time employees, mostly cutting and packaging cables. Revenues in the first year were a none-too-promising $100,000.

From selling wire, the pair quickly moved to installing networks. From there, they began designing and manufacturing equipment for the networks—including the parts that connect the PCs to telephones and to the high-powered computer that manages the data flow.

A typical Cabletron contract in the mid-Eighties might have been for cable, installation and equipment. But the most profitable part of the deal was a small box containing a circuit board that controlled information coming into and going out of each of the PCs on the network.

A network of 80 computers required 80 of these little boxes, at $250 apiece, or $20,000. And Cabletron's tiny engineering department designed a box that would not only control information input but would also help technicians diagnose problems with its connection into the network.

Cabletron priced its product 15% below competing products. On the strength of this new product, sales took off, from $4 million in 1986 to $25 million in 1988.

Then, in 1988, the company introduced what it calls a "smart hub," a sophisticated management system for networks. A smart hub might typically monitor 84 PCs on a network, allowing a technician to locate loose wires or faulty computers instantly, rather than searching from computer

Cabletron Systems' Benson and Levine
Not your typical high-tech nerds.

to computer for the problem.

This they priced at $37,000, plus a $4,400 annual service charge. In fiscal 1990 the hubs accounted for sales of $60 million, or more than half of Cabletron's revenues.

Levine and Benson hardly fit the nerdy image of high-tech entrepreneurs. Levine, whose weightlifter muscles bulge through his polyester shirt, likes to talk about being voted least likely to succeed in the class of '76 at Bancroft High School in Worcester, Mass. The son of a wire and cable manufacturer, he scraped through the University of Miami with a 2.1 grade point average, earning a bachelor's degree in business in 1980.

Brian Smith

"I frankly tell my customers I'm not a computer whiz," he laughs. "I take one of our engineers with me."

The more button-down Benson is no less irreverent. "I've got a real degree," he chimes in with a smirk after Levine finishes telling his tale of academic woe. (The son of a college professor, Benson holds an M.B.A. from Syracuse.) "I didn't go to some beer-drinking Sunbelt school."

Irreverent or not, their aggressive behavior has allowed them to catch the networking wave and ride it quite capably. Among the company's major customers: Harvard University, Boston University and Shearson Lehman.

"We entered the networking business just as it was about to take off," says Benson. "So you got business whether your service was good or bad." Indeed, since 1985 the market for local area network equipment has grown from $300 million to an estimated $7 billion this year.

Service was where Cabletron grabbed its initial toehold. Explains Levine: "When we started in 1983, you couldn't get cable in less than 90 days. We stocked in my garage and shipped it out in 48 hours."

By 1985 they had moved from the garage to New Hampshire, where they could find lower taxes and cheaper labor, and where manufacturing space rented at half the price of comparable space in the Boston area.

Low housing costs also helped attract hardware and software engineers from Route 128's stumbling computer businesses. In the last five years Cabletron's research and development department has grown from 5 engineers to a current 225.

And the company, which had previously focused strictly on the "ethernet" standard for local area networks (65% of the networking market), recently began shipping products for IBM's "token ring" standard, which makes up the other 35% of the networking market.

Being in the right place at the right time with the right product has provided Levine, now 32, and Benson, now 36, with a life not nearly so austere as Benson's office would indicate. Levine owns 36% of Cabletron's 26 million New York Stock Exchange-listed shares; they're worth nearly $220 million, on paper. Benson owns 29% of the company, a stake worth over $170 million. Each also sold over $20 million worth of stock in the company's $84 million initial public offering in May 1989.

But debt-free Cabletron, which has seen its stock price rise from 16 to 23 in recent weeks (giving it a market value of nearly $600 million, or almost 30 times earnings), could run into trouble sustaining its growth. Growth in demand for its computer board product—15% of revenues—is slowing. And Cabletron is still number two in the market, after Mountain Valley, Calif.-based Synoptics, in its hottest product line, the smart hub.

Benson concedes that they were two years behind Synoptics in getting to market with the smart hub but says Cabletron's R&D department has a new product that leapfrogs its rivals' technologies. Still, he admits that no one is really sure what direction the networking market might take next.

And Cabletron's financials point up a few danger signals. Selling costs rose 60% faster than its revenues in the first six months of this year. Inventories, too, at $33 million, seem high for a company in a rapidly changing market. Might not Cabletron be hit by a sudden fall in demand or by the introduction of new technology?

Levine and Benson think not. "We are like a bakery which doesn't care if there's demand for raspberry crullers or raspberry doughnuts," says Levine, speaking of the company's entry, in September, into the market for token ring network products. "We have the raspberry and the dough, so we can make either."

Levine is counting heavily on their management systems for token ring networks to propel the company's next stage of growth. Thus far the $800 million market for these boxes has been dominated by IBM.

"We are not engineers, and so we don't get wrapped up in the technology," says Benson. "We make what the market wants and not what our engineers might be interested in."

There's no question that the pair have made a great go of things so far. But now that they've built a $600 million (market value) company, the real challenge will be to maintain its growth. The Cabletron story is far from over. ■

Why is Bridgford Foods expanding in a recession? Allan Bridgford's reply is a tale of a man, his boy and a hot dog stand.

Family affair

By Christopher Palmeri

ALLAN BRIDGFORD knew he had a good product when the head of research at a competitor called and politely asked how Bridgford Foods Corp. kept its microwave hamburger buns so soft. "I said, 'You know that happens to be a trade secret,' " Allan recalls. The man asked if he could buy the recipe, or just the rolls. Allan declined, and, after a chat with brother William, resolved to step up marketing for Bridgford's two-year-old line of microwave burgers, roast beef sandwiches and chili dogs.

The unassuming Bridgford brothers—William, 59, is the company's chairman; Allan, 55, is president—take the food business seriously. Last year their Anaheim, Calif.-based food processing company sold $73 million worth of snack foods, luncheon meats, ready-to-eat sandwiches and frozen bread dough.

"We survive by making high-quality, niche products," says Allan. And by emphasizing service. Bridgford's lunch meats and sausages compete with the likes of Oscar Mayer, Hormel and Swift. But Bridgford's 110-person sales staff is able to get into supermarkets and convenience stores by stocking the shelves themselves. By contrast, Bridgford's big competitors generally sell through food brokers whose distributors merely drop their products on the stores' loading docks. Bridgford will even put price tags on the products at the plant and reimburse the stores for unsold items. "We do everything but sweep the floor," jokes Allan.

The Bridgfords, whose butcher father, Hugh, now 82, founded the firm in 1932, pare costs to the bone. The boys share a small, cluttered office just off of the plant floor of Bridgford Foods' Anaheim facility. From their desks, William, who heads up produc-

Bill Nation/Sygma

Bridgford Foods' Allan and William Bridgford
Putting up more signs. Hiring more hot dog salesmen.

tion, and Allan, who handles sales and marketing, can glance through a window and watch packages of salami drop from a conveyor belt. If one of the brothers steps away from the office, the other answers his phone. They have no secretary. "We can cuss all we want," says William.

The Bridgfords' austerity at the office is not the only way they watch costs. William monitors daily printouts from the company's six plants. The printouts tell him production efficiency in hours and in dollars for each of the company's 100-plus products. He proudly shows a visitor how he's able to match increasing Thanksgiving demand for Parkerhouse roll dough with supplies stored at a rented warehouse. "I've really grown to love computers," he says. As well he should. His wife, Diane, is the assistant manager of data processing at the firm, a job she was given in 1974, because, jokes William, "she was the only one who could spell computers." In all, ten family members work for the over-the-counter-traded firm, ranked 68th on our list of the 200 Best Small Companies in America.

Bill Nation/Sygma

Assembling sandwiches for the microwave
Soft buns are the secret.

Agile little Bridgford has never been bashful about bringing out new products. In 1962 the company was the first to market frozen bread dough, discovered accidentally when a Bridgford baker stored some already mixed dough in the freezer overnight. Next day he thawed it out, and it baked up just fine. After tinkering with the yeast—so the dough would still rise after being frozen for months—they sent the product to market. By being first, Bridgford has built up a brand-name presence in many regions—like Florida and California—that bigger companies have had difficulty cracking. These days about half the company's frozen dough sales (worth over $25 million a year) are to the restaurant and food service industry, a market where advertising is less important than sales relationships.

Not all of Bridgford's innovations have been winners, however. In 1980 the Bridgfords reasoned that since they already made dough and pepperoni, adding cheese and tomato sauce to create frozen pizza kits was a reasonable extension of their talents. Home pizza chefs would thaw the dough, toss it like pizza professionals, spread out the goodies and bake it.

It sounded great, but the product died in six months. "People didn't want to take time to defrost the dough," explains Allan with a shrug. "If you want pizza, you want it now."

Undeterred, Bridgford kept trying, introducing in 1988 a product line that should have far more staying power: microwave burgers, which it markets mainly in the Southwest. The company faces tough competition in the microwave market from the likes of Campbell's Souper-Combos, Hormel's New Traditions and J.R. Simplot's MicroMagic line of burgers, fries and even milk shakes.

How are the burgers? An informal test by FORBES found the Bridgford flame-broiled cheeseburger by far the tastiest. The *Las Vegas Review-Journal* even rated it ahead of stalwarts like McDonald's and Burger King. "The fun part about this business is making good things to eat," says William.

The Bridgfords' slow but steady approach has begun to pay off in the microwave line. For example, Campbell rolled out a microwave line of soup-and-sandwich (including burgers) combinations nationwide a year after Bridgford's basic burgers hit the shelves. But the soup giant recently discontinued 6 of its 11 Souper-Combo items, and it is reevaluating the rest of the line. Bridgford, on the other hand, launched its product in the Southwest and has been moving cautiously across the Sunbelt. Only recently has it extended the line to include other sandwiches. "We take one city at a time and don't waste our money," Allan says.

Asked how his company will deal with recession, Allan chortles: "Have you heard about the college boy who comes back to his dad's hot dog stand and says, 'Dad, don't you know we're having a recession, take down the sign, pull back, things are bad.' And sure enough, things got bad."

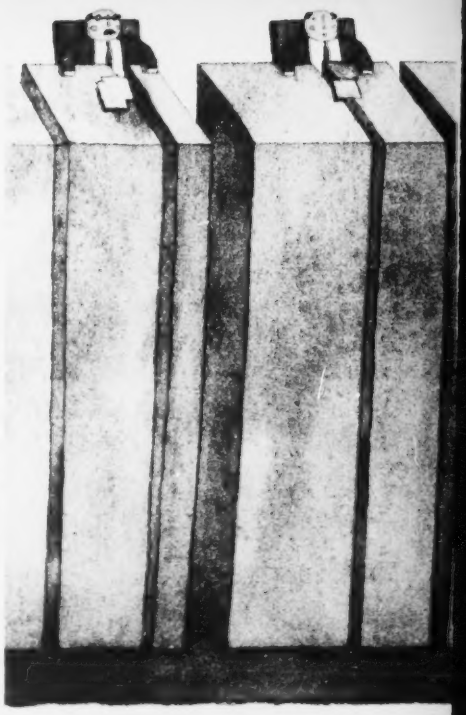
The Bridgfords are taking the opposite tack. They are putting up more signs and hiring more hot dog salesmen; in the past six months, they've upped their sales staff by nearly 10%. "We're not going to fall for the hold-back-and-wait strategy," Allan adds. "We advertise more and step up the sales effort in hard times, because we have a strong balance sheet [$3.2 million in cash and no long-term debt] and we know what everything costs."

The Bridgfords' folksy and aggressive management has pleased their shareholders. Last year the company earned $3.5 million, or 84 cents a share. And since 1985 its stock price has appreciated tenfold, adjusted for splits. According to William Blair & Co.'s Ronald Strauss, the only analyst who follows the stock, earnings should come in at nearly $1 a share this year. At a recent price of 15, the Bridgford family's 61% of the company is worth nearly $40 million.

The Bridgford brothers get offers all the time to sell out. But don't expect that to happen. A third generation is already being groomed to take over the company. Besides, William and Allan, who've never sold a share of Bridgford stock, are clearly having too much fun to quit. ■

Inside many big companies is an entrepreneurial company struggling to escape. Here are a few that did, and joined the ranks of the 200 Best Small Companies.

The great escape



By Joel Millman

OUR DIFFICULTY was not competition from other packaging businesses," says Marvin Ozley, chief executive of Sealright Co., Inc. The $190 million (1989 revenues) maker of cardboard ice cream containers and food packaging was acquired by Phillips Petroleum in 1964. "Our competition," he says, "was from Phillips' core business."

How did a tiny ice cream container maker become part of a giant oil company? Like many of the misguided acquisitions of the go-go Sixties, it probably seemed a good idea at the time. Phillips figured to sell the Kansas City, Mo.-based company the polyethylene resins that Sealright needed to make its containers.

Plus, Phillips had an idea to expand the market for its resins. Sealright would use the material to make plastic containers in place of paper to package dairy products. But dairies started making plastic containers on their own using a new technology, so Phillips had to shelve the project.

Worse, recalls Ozley, 56, a former Phillips chemist who joined Sealright's research and development team in 1966, the little company was often operating with one arm tied behind its back. "The petroleum business requires enormous amounts of capital," he explains. Phillips was spending most of its capital on exploring oil in the North Sea and Alaska, which meant that Sealright's growth plans got squeezed.

So in 1983 Sealright and Phillips decided to call it quits. Sealright's then-chairman, A. Major Hull, led a $47.7 million leveraged buyout, putting up just $3.5 million in cash and taking on more than $44 million worth of debt.

Once independent, management refocused its business on frozen dessert packaging and concentrated on whittling down the company's imposing debt load. Sales rose from $91 million in 1982, the last full year the company was owned by Phillips, to $121 million in 1986. Operating profit increased much faster, climbing from $9 million to $16 million.

Flush with success, Sealright raised $12 million to help pay down debt in a 1986 public offering for 22% of its shares. Debt now stands at $15 million, or 8% of capitalization. Last year Sealright, which is ranked 40th on our list of 200 Best Small Companies, earned aftertax profits of $14.3 million. Five-year average return on equity: an enviable 24.2%.

"I don't mean to be harsh to our former parent," says Ozley. "But we were better able to handle our capital program after the buyout than before." Since 1985 Sealright has plowed $53 million into capital spending, compared with just $22 million in the five years preceding the LBO.

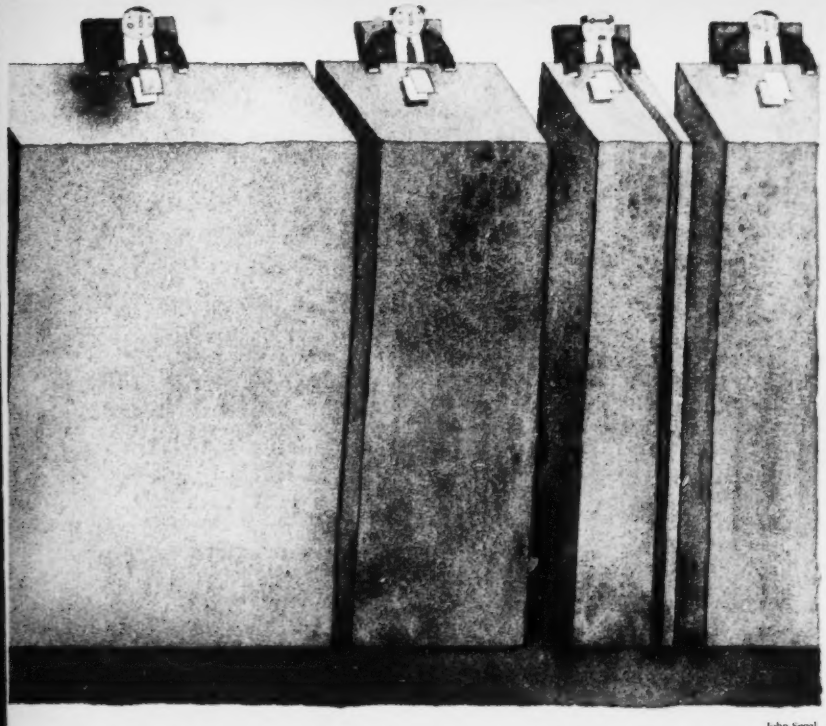
Another aborted oil company diversification to find its way to our Up & Comers list this year is Wayne, Pa.-based SunGard Data Systems. Begun as a subsidiary of Sun Co. Inc. in 1976, SunGard (1989 revenues, $201 million) sells disaster recovery services for data processing operations to customers like Amoco, Bell Atlantic and RJR Nabisco.

That means collecting data daily from customers and keeping a battery of mainframes and minicomputers on hand for their use on short notice. Then, in the event of an emergency—like a fire in a client's computer room—SunGard's computers can be configured to duplicate the client's operations at an alternate site, allowing the company's data processing departments to be back up and running within 24 hours.

SunGard evolved out of Sun's data processing department, which had developed its own backup recovery service. It expanded by offering financial services software to the banking, insurance and brokerage industries.

But under Sun's ownership, the SunGard division was operated with the mind-set of a big bureaucratic organization rather than that of a small entrepreneurial outfit.

"When we were part of Sun, there was a corporate staff [at SunGard] in excess of 100 people," recalls current SunGard Chief Executive James Mann, 56, who was recruited by the venture capital group that acquired SunGard from Sun in a $20 million leveraged buyout in 1983. "That was when SunGard had revenues of about $30 million," says Mann. "Today, we're well over $200 million, and our



John Segal

corporate staff is 13." Under Sun, even minor decisions had to be cleared by several layers of management, causing weeks of delay. Today, with only one layer of management, SunGard executives can decide on a $5 million acquisition in two days.

SunGard, which went public in 1986, raising $23 million, earned $17 million last year. Since it became independent, operating margins have risen from 13% to almost 20%.

Sometimes solid little divisions of large companies simply fall victim to their parents' short-term myopia. Case in point: Pittsburgh-based Calgon Carbon Corp., ranked 39th on our Up & Comers list. Calgon, which was acquired by pharmaceuticals giant Merck & Co. in 1968, makes activated carbon, a chemical used in water purification and food processing. But while the company had solid growth—from $11 million in revenues in 1968 to $99 million in 1982—Merck grew impatient with the division's failure to meet the corporate-wide mandate of a 15% return on assets. In 1983 Merck put the division up for sale.

There were no takers until general manager Thomas McConomy, now 57, came forward with a superleveraged $110 million management buyout plan. Exasperated with Calgon's 8% and 9% returns—despite McConomy's insistence that the market would turn around—Merck agreed to a deal in 1985 in which management put up less than $1 million in cash and borrowed the rest.

Calgon management knew best: The company, which raised $53 million in a June 1987 public offering, earned $35 million last year on revenues of $253 million. And even after a couple of recent acquisitions, the company's debt load has been reduced to less than 5% of capitalization. Says McConomy: "Merck, basically, just ran out of patience." McConomy, on the other hand, has had his patience rewarded with a 12.7% stake in the company, recently worth $89 million on paper.

Independence isn't just good for the boss' pocketbook. It also makes it easier for companies to tailor incentive plans to employees throughout the organization. After the buyout, for instance, SunGard spread 20% of its ownership among some 30 top and middle-level managers. Today, cash incentives and performance bonuses regularly run as high as 40% of salary for some managers.

In all, at least a dozen of the 200 companies on our list of the country's best small companies have emerged from larger companies. Most have been buyouts and spinoffs. But two—Tech/Ops Sevcon, a specialty electronics company, and Tech/Ops Landauer, which does personnel radiation monitoring for firms using X-ray equipment—were formed when Boston-based Tech/Ops, Inc. simply cleaved itself in two in 1988. (Tech/Ops, Inc. made our list in 1982.)

Among this group, one stands out: Donaldsonville, La.-based Melamine Chemicals, the number-one-ranked company on our Up & Comers list this year. The $38 million (fiscal 1990 revenues) firm, formed in 1968 as a joint venture between Ashland Oil and First Mississippi Corp., produces a chemical called melamine used in automotive paints and industrial enamels. Last year's earnings: $7.6 million; five-year average return on equity: over 100%.

Part of Melamine's original mission was to be a customer for First Mississippi, which was looking for a market for urea, a product of its fertilizer division and the basic raw material from which melamine is made. But like Sealright, the company found itself competing with its parents for capital outlays. "It tended to be a bit inhibiting when you had several different agendas to work toward," says 48-year-old Melamine President Roger Thomas, who has been with the company since 1974. For instance, in marketing, Ashland would tend to favor high volume at modest prices while First Mississippi favored a higher price.

In 1987 Ashland and First Mississippi sold 36% of their respective holdings to the public; an additional 1.5 million new shares were sold, raising $18 million for the company. The cash infusion allowed Melamine to build a new plant, expanding capacity by 40%.

"We cut the strings from our parents," says Thomas. "Now we live and die by our business. If our chemical doesn't do well, or we don't produce it economically, we don't have another division we can transfer to."

Freedom often complicates life. But it also produces more profits. And to judge from the people who run the companies that have been set free, it makes life a lot more fun. ■

Grist for the taxman's mill

1. Clarke M. Williams Jr.
Century Telephone Enterprises
$2,069,900

By Fleming Meeks

As we go to press, Congress and the Administration are still wrestling over the budget's final provisions. But both parties (the Remocrats and Depublicans, as *The Wall Street Journal*'s editorial page puts it so well) have agreed to punish "wealthy" and "rich" people, defined as those earning over $1 million a year. On this page and the next are eight highly productive businessmen, the fruits of whose job-creating labors will subject them to the full wrath of the tax hike, as well as two who come in under the $1 million mark.

Worst hit will be Clarke Williams Jr., recently retired chief executive of Century Telephone Enterprises. Last year was a good one for the $213 million (revenues) Monroe, La.-based telephone company, which ranked 176th this year on our list of the 200 Best Small Companies in America. It increased its number of telephone lines from 239,000 to 296,000, mainly through the acquisition of Wisconsin-based Universal Telephone, and its substantial cellular operations moved closer to break-even. For this performance, Williams, 41, who stepped down from his post in September for health reasons, earned $2.07 million, including salary, bonuses and the exercising of $1.5 million in stock options, making him the highest-paid chief executive on our Up & Comers list. (For a listing of all 200 chief executives, what they made and their educational background, see the tables beginning on page 266.)

Second by a nose to Williams was Thomas Haire, 46, chief executive of Atlanta-based T2 Medical. T2 Medical operates 93 medical and therapy centers, and is number eight on our list. The six-year-old firm earned $8 million on revenues of $38 million last year. Haire's total compensation—including a $257,500 base salary, benefits and exercise of $1.8 million in stock options—came in at just $400 under Williams.

Then there's 37-year-old Robert Haft, chief executive of Landover, Md.-based Crown Books, operator of 257 discount bookstores nationwide and number 168 on our list. (Haft is also president of the $908 million [revenues] Dart Group and a member of the Haft clan, whose net worth Forbes estimates at $450 million.) Crown earned $10.3 million on revenues of $204 million last year. Haft was paid a flat salary of $1.3 million, plus nearly $300,000 in bonuses and director's fees. "Are you sure?" Haft asked, when questioned about his substantial payday. "I really have no idea what I make," he adds.

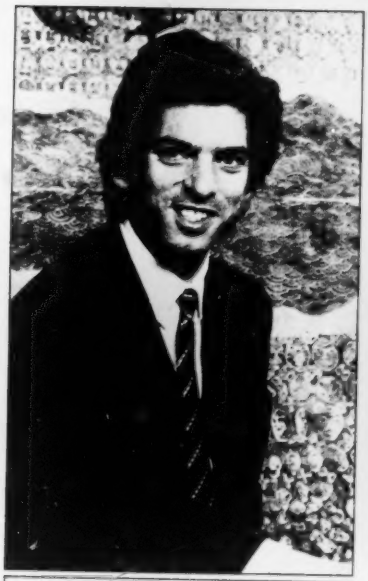
Not all the ten best paid executives got a raise last year. Robert Levine, 32, president of Rochester, N.H.-based Cabletron Systems *(see story, p. 226)*, earned $1.04 million last year. But that was a 57% pay cut from the year before, when Cabletron, the second-ranked company on our list, earned $11.8 million, and Levine took home a cool $2.44 million—before taxes, of course.

2. Thomas E. Haire
T2 Medical
$2,069,500

3. Samuel B. Davis
Liqui-Box
$2,040,300

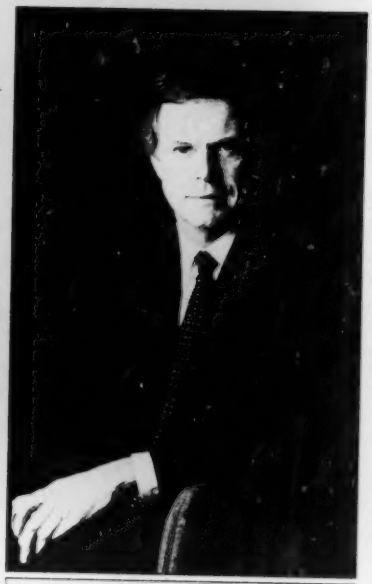
4. J.M. Wayne Code
Vallen
$1,666,000

The 200 Best's Best Paid Executives



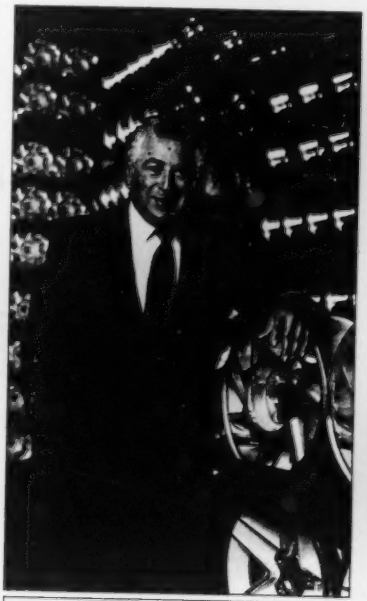
5. Robert M. Haft
Crown Books
$1,576,000

6. William O. Bailey
MBIA
$1,146,800

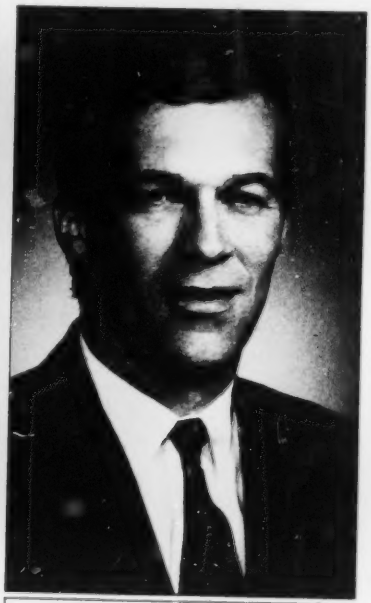


7. Robert J. Higgins
Trans World Music
$1,125,300

8. S. Robert Levine
Cabletron Systems
$1,039,400



9. Louis L. Borick
Superior Industries International
$925,000



10. John R. Potter
FlowMole
$886,800

Among the companies on this and previous years' lists of the best small companies, a handful are truly exceptional.

The small company honor roll

By Steve Kichen

OVER THE LAST 11 years, more than 1,300 different corporations have appeared on our best small companies list. Some have been bought out, others have burned out, and still others have simply been outclassed. Only one, FlightSafety International, has been able to make the grade every year.

FlightSafety and the 14 other honor roll members have qualified for our best small companies list at least four times in the past five years. And their return on equity has also exceeded 15% for both the last five years and the latest 12 months. Their stocks have outperformed the S&P 500 over the last half-decade.

Ryan's Family Steak Houses has made our list six times; the first time was in 1985, when sales were $41 million. Ryan's latest 12-month revenues hit $262 million. "The main thing is quality, quality, quality," says Alvin McCall Jr., 53, chairman and founder. Ryan's reputation for good food at reasonable prices has boosted average per-unit sales to $2.3 million; its net profit margin is 9%. This represents the highest sales per restaurant and the highest net profit margin among competitive steak houses in its market.

NYMagic specializes in marine, aviation and other liability insurance. "We only write about $200 million in business; I don't know how anyone could run a Travelers without having a nervous breakdown," says President Mark W. Blackman, 39. Blackman notes that growth can work against a company: If you plow back profits into retained earnings, you have to show higher profits the next year just to keep the same return on equity.

Which, if any, of these exceptional small companies will continue to match their past rates of growth and profitability and appear on the honor roll next year? That's impossible to know. But with little debt and lots of managerial talent, they all have a good shot at a repeat appearance. ■

The best of the best

These 15 companies have qualified for our best small companies list at least four times in the past five years and still show exceptional profitability. A hypothetical $10,000 investment in each firm made Oct. 18, 1985 has grown to $439,744. Excluding dividends, $150,000 invested in the S&P 500 would be worth only $240,614.

Company	Years on list*	Return on equity 5-year average	Return on equity Latest 12 months	5-year growth sales	5-year growth EPS	Recent price	Value of $10,000 invested†	Chief executive
American List	6	30.9%	48.9%	13%	27%	19	$30,405	Martin Lerner
Biomet	5	20.1	24.9	42	49	26	67,826	Dane A Miller
Boston Acoustics	4	22.7	23.9	23	33	18	23,279	Francis L Reed
Cintas	6	17.4	20.8	23	22	41	22,041	Richard T Farmer
Diagnostic Prods	6	20.3	23.6	28	33	30	44,630	Sigi Ziering
FlightSafety Intl	11	18.4	21.1	22	21	41	26,230	Albert L Ueltschi
Franklin Resources	7	46.3	40.9	33	47	24	36,375	Charles B Johnson
Frontier Insurance Group	4	23.1	27.2	36	48	19	27,047	Walter A Rhulen
Intl Dairy Queen Cl A	4	36.6	34.6	13	26	47	27,794	Michael P Sullivan
Liqui-Box	5	22.2	23.3	13	18	55	20,469	Samuel B Davis
Mentor	8	18.1	21.3	15	24	13	18,136	Christopher J Conway
NYMagic	6	17.5	18.3	17	26	21	20,847	Mark W Blackman
Ryan's Family Steak Houses	6	17.5	18.8	43	36	5	19,418	Charles D Way
Stryker	9	17.2	19.1	21	23	23	31,765	John W Brown
Tootsie Roll Industries	5	18.8	19.3	13	18	36	23,482	Melvin J Gordon
Total							$439,744	

*Since 1980. †On Oct. 18, 1985.

Sources: William O'Neil & Co.; Forbes

What it takes to be the best

Almost 4,300 public U.S. corporations meet our definition of small—latest 12-month sales between $5 million and $350 million—but our stringent growth and quality requirements eliminated most of these contenders. We used a five-year time interval to test for consistency of earnings and sales growth. This ensures relatively fast growth today, and a history of above-average growth during the last few years. We eliminated companies that might be on the verge of faltering by requiring earnings growth over the most recent quarter as well as the last four quarters. Highly leveraged companies—those with more debt than equity, as of the latest fiscal year-end balance sheet—were also dropped, as were companies whose stock prices did poorest relative to the overall market.

Does this mean all the companies on our list will fare well in the future? Of course not. But their recent performance suggests superior management. William O'Neil & Co. in Los Angeles provided most of the data for this table. Earnings estimates come from the Institutional Brokers Estimate System, a service of Lynch, Jones & Ryan.

Rank this year	Rank last year	Company/business	Return on equity 5-year average	Return on equity latest 12 mos	5-year EPS growth rate	Latest 12 mos sales (millions)	Latest 12 mos profits (millions)	Debt/ equity	Quick ratio[1]	Recent stock price	Market value (mil)	Latest 12 mos EPS	Latest 12 mos P/E	Est 1990 EPS
1	■	**Melamine Chems** specialty chemicals	100%*	25.2%	54%	$37.8	$7.6	0%	2.31	8	$45.6	$1.39	6.0	$1.40[2]
2	■	**Cabletron Systems** computer network equip & svcs	51.5	40.0	198	134.8	26.9	0	2.38	18	463.2	1.03	17.1	1.22
3	■	**BMC Software** computer software	50.7	38.9	94	102.0	22.4	0	NA	19	402.4	0.91	20.5	1.14
4	5	**Franklin Resources** fund management	46.3	40.9	47	282.5	88.6	3	NA	24	952.1	2.26	10.7	2.32
5	■	**Digi Intl** data communications equip & software	44.7	73.0	146	20.3	4.2	0	2.07	12	46.3	1.10	10.9	1.18
6	4	**Tech-Ops Landauer** radiation monitoring svcs	43.8	36.2	22	23.8	6.4	2	1.91	25	105.9	1.52	16.4	1.56
7	■	**Adobe Systems** computer software	43.6	64.6	132	153.2	38.0	1	2.23	19	387.3	1.75	10.7	1.76
8	■	**T2 Medical** infusion therapy centers	43.4	29.0	74	58.6	12.2	54	1.73	17	239.7	0.99	17.4	1.13
9	■	**Sullivan Dental Products** dental supplies & equip	38.7	55.0	89	40.8	1.9	4	NA	15	51.3	0.71	20.8	0.72
10	■	**Seattle FilmWorks** photofinishing svcs	37.0	58.1	42	32.4	1.9	72	1.22	6	11.2	0.99	6.3	1.00
11	9	**Intl Dairy Queen Cl A** fast-food restaurants	36.6	34.6	26	282.5	26.2	29	1.56	47	431.9	2.85	16.6	2.87
12	29	**Lindsay Mfg** electrical irrigation sys	35.2	49.6	107	94.5	7.9	0	1.35	15	45.3	2.57	5.7	2.67
13	■	**Amer Power Conversion** power supply equip	33.6	49.8	189	47.6	7.5	23	2.1	12	128.6	0.70	17.5	0.82
14	■	**Forschner Group** leisure & recreational prods	33.6	43.1	22	46.6	3.2	99	2.28	5	20.0	0.78	6.7	0.75
15	■	**Cisco Systems** computer network equip	31.6	20.1	2.62	69.9	13.9	0	1.47	22	267.6	1.00	21.8	1.40[2]
16	39	**American List** student mailing lists	30.9	48.9	27	8.2	4.4	0	NA	19	51.8	1.60	11.7	NA

Stock prices as of Oct. 12. *Figure greater than 100%. NA: Not available or applicable. [1]Current assets less inventories divided by current liabilities. [2]1991 estimate.

Sources: William O'Neil & Co.; Institutional Brokers Estimate System, via Lotus One Source.

The 200 Best Small Companies in America

Rank this year	Rank last year	Company/business	Return on equity 5-year average	Return on equity latest 12 mos	5-year EPS growth rate	Latest 12 mos sales (millions)	Latest 12 mos profits (millions)	Debt/ equity	Quick ratio[1]	Recent stock price	Market value (mil)	Latest 12 mos EPS	Latest 12 mos P/E	Est 1990 EPS
17	2	**Allwaste** pollution control equip & svs	29.6%	43.1%	52%	$199.9	14.6%	18%	2.53	6	$208.4	$0.48	12.8	$0.50
18	20	**BeautiControl Cosm** cosmetics	29.5	38.6	24	51.3	5.9	0	1.91	15	70.7	1.14	12.8	1.21
19	■	**Sierra On-Line** computer games	29.5	25.0	102	30.3	5.1	0	4.53	12	43.9	1.39	8.8	1.65
20	19	**Kaydon** bearings, filtration prods	29.3	26.6	31	164.6	24.1	30	0.93	29	250.2	2.80	10.4	3.04
21	■	**Integrated Systems** CAE software	29.2	40.3	45	16.7	2.8	0	NA	8	67.7	0.37	22.6	NA
22	■	**SafeCard Services** credit card loss svcs	28.4	22.9	11	128.6	25.5	3	NA	6	158.4	0.89	6.7	0.94
23	25	**Heartland Express** trucking	27.7	27.2	28	53.8	6.5	0	NA	17	82.5	1.30	12.7	1.40
24	18	**Group 1 Software** computer software	27.6	23.6	57	20.5	3.0	3	NA	5	21.8	0.71	7.4	NA
25	■	**Arkansas Freightways** trucking	27.5	22.6	76	118.1	6.4	87	1.35	17	93.0	1.16	14.4	1.32
26	■	**Home Nutritional Svcs** home medical care	27.2	18.0	51	72.8	8.3	0	9.51	11	132.8	0.75	15.0	0.85
27	■	**Goal Systems Intl** data center mgmt software	26.9	37.0	26	82.6	11.6	21	NA	10	170.3	0.75	12.7	0.80
28	34	**Oshkosh B'Gosh Cl A** apparel	26.9	28.0	20	324.7	36.0	4	0.98	22	319.1	2.47	8.9	2.28
29	75	**Technalysis** computer & technical svcs	26.8	41.0	19	20.8	2.1	0	2.26	8	17.7	0.93	8.9	0.97
30	■	**Trans World Music** record stores	26.2	24.8	36	329.1	16.1	49	0.39	18	158.5	1.78	9.8	2.04
31	■	**CSS Industries** paper prods, containers	26.1	24.7	52	149.6	14.9	25	2.66	15	77.5	3.04	4.9	3.11
32	48	**Preferred Health Care** heath care svcs	25.9	28.5	34	29.6	4.2	3	NA	8	85.3	0.39	20.2	0.46
33	13	**System Software Assoc** software for IBM mainframes	25.9	30.2	67	110.9	14.9	4	1.71	14	162.2	1.26	11.1	1.37
34	27	**Autodesk** CAD software	25.8	32.9	56	209.6	52.4	0	4.54	35	844.4	2.15	16.2	2.41
35	■	**Respironics** respiratory medical prods	25.7	26.7	28	23.0	2.2	0	3.35	14	47.1	0.62	22.6	0.80[2]
36	46	**Sanford** office & school supplies	25.5	29.1	40	134.1	23.5	2	1.34	23	333.7	1.57	14.3	1.59
37	102	**Ballard Med Products** disposable medical prods	25.4	40.9	124	29.1	5.6	0	5.64	26	135.6	1.01	25.2	0.99
38	31	**Pioneer Group** mutual fund management	25.0	23.3	15	62.2	15.6	26	NA	17	102.7	2.55	6.6	2.51
39	32	**Calgon Carbon** activated carbon	24.6	22.9	36	263.1	37.1	11	2.58	33	667.4	1.83	18.0	2.05

Stock prices as of Oct. 12. NA: Not available or applicable. [1]Current assets less inventories divided by current liabilities. [2]1991 estimate.

Sources: William O'Neil & Co., Institutional Brokers Estimate System, via Lotus One Source.

The 200 Best Small Companies in America

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40	35	**Sealright** packaging materials	24.2%	23.0%	26%	$196.7	$14.9	27%	1.05	16	$174.0	$1.35	11.7	$1.41
41	40	**Fastenal** fasteners; retail bldg materials	24.0	31.4	38	47.4	5.5	4	2.78	18	166.0	0.58	30.2	0.67
42	■	**MacNeal-Schwendler** CAE software	24.0	23.5	19	49.3	10.1	0	NA	7	81.0	0.85	7.9	0.89
43	83	**Acuson** ultrasound medical instruments	23.8	29.4	116	253.5	42.6	0	3.18	25	860.3	1.19	20.9	1.34
44	■	**Juno Lighting** lighting fixtures	23.4	23.1	19	84.9	14.0	7	5.56	14	126.3	1.52	9.0	1.54
45	73	**Hipotronics** electrical testing equip	23.2	27.9	25	26.0	3.3	11	2.07	16	32.4	1.58	10.0	1.60
46	64	**Frontier Ins Group** insurance	23.1	27.2	48	77.9	10.6	0	NA	19	84.3	2.39	7.9	2.46
47	■	**Johnson Worldwide Cl A** recreation equip	23.0	20.9	19	269.7	16.0	19	1.82	21	161.1	2.00	10.3	1.99
48	■	**Boole & Babbage** software	22.9	36.3	44	91.9	5.5	0	1.29	11	43.2	1.43	7.7	1.32
49	■	**Lawson Products** distrib equip parts	22.8	25.9	19	182.4	23.6	0	3.7	26	348.8	1.74	14.8	1.78
50	93	**St Jude Medical** heart valves	22.8	31.2	63	162.7	57.9	0	10.17	27	1,254.7	1.22	21.9	1.34
51	51	**Boston Acoustics** audio speaker systems	22.7	23.9	33	27.8	3.6	0	6.91	18	36.3	1.79	9.9	2.03
52	■	**Concord Computing** computer svcs for retail stores	22.6	34.9	129	34.8	4.5	7	1.87	23	75.1	1.27	17.7	1.33
53	62	**Total System Services** financial data processing svcs	22.6	23.4	29	70.8	11.9	0	6.28	34	540.2	0.75	45.3	0.84
54	67	**Liqui-Box** packaging	22.2	23.3	18	112.2	9.9	6	0.88	55	125.5	4.22	12.9	NA
55	■	**Washington Fed S&L** savings & loan	22.1	22.7	19	275.4	63.0	0	1.07	24	513.6	2.87	8.3	2.91
56	92	**Cadence Design Sys** CAD software	21.8	32.7	57	175.2	33.9	9	NA	15	422.2	1.11	13.3	1.26
57	■	**Utah Medical Products** disposable medical prods	21.7	49.0	94	20.5	3.4	1	1.52	9	65.1	0.44	19.9	0.50
58	■	**Lindal Cedar Homes** pre-cut cedar homes	21.6	20.4	9	49.2	2.1	11	0.81	5	13.4	0.81	6.5	0.86
59	107	**DH Technology** computer equip	21.4	30.2	66	44.6	6.7	14	3.62	7	34.1	1.33	5.4	1.25
60	91	**Software Publishing** software	21.4	31.7	60	128.8	21.1	0	4.33	17	200.6	1.71	9.8	1.85
61	■	**Southern Mineral** oil & gas explor, prod	21.4	164.3	34	12.4	6.3	0	NA	4	17.3	1.56	2.8	NA
62	65	**Expeditors Intl Wash** intl freight forwarding	21.3	21.6	29	193.7	9.6	4	NA	16	93.5	1.64	9.9	1.75

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63	124	**Keane** computer svcs & systems	21.3%	33.6%	66%	$89.8	$4.3	36%	NA	13	$61.4	$1.03	13.0	$1.12
64	76	**Mestek** climate-control equip, environ svcs	21.3	24.1	22	189.0	9.2	51	1.65	6	47.9	0.94	6.8	1.10
65	85	**Modern Controls** precision test instruments	21.3	25.0	26	10.7	2.3	0	6.76	13	40.9	0.70	18.6	0.76
66	■	**Digital Systems Intl** telecommunications equip	21.2	63.0	137	28.3	5.4	14	1.51	11	92.3	0.70	15.7	0.96
67	■	**Electronic Arts** computer games	21.1	19.9	26	75.8	6.5	0	2.46	8	72.4	0.70	11.1	0.90
68	■	**Bridgford Foods** frozen & snack food prods	20.9	29.3	81	82.2	3.9	0	1.09	15	62.6	0.94	16.0	0.63
69	74	**National Pizza** Pizza Hut franchisor	20.5	21.4	21	227.5	15.4	92	0.46	18	245.6	1.11	16.0	1.25
70	38	**Penn Treaty American** supplemental health insurance	20.4	16.8	23	37.6	5.4	8	NA	10	34.9	1.87	5.3	1.95
71	87	**Diagnostic Prods** medical diagnostic kits	20.3	23.6	33	67.9	16.8	0	2.94	30	359.8	1.31	23.0	1.45
72	106	**Intl Recovery** waste management, aviation svcs	20.3	20.8	83	167.9	4.3	46	2.62	11	50.4	0.94	12.0	1.08
73	■	**Digital Microwave** fiber optics, microwave equip	20.2	19.8	89	122.3	13.4	0	1.85	12	139.4	1.08	10.9	1.27
74	103	**Biomet** medical implant devices	20.1	24.9	49	170.7	32.2	0	3.85	26	723.9	1.16	22.4	1.35
75	■	**Analysts Intl** computer svcs & software	20.0	39.1	87	107.8	6.0	0	NA	12	52.6	1.29	8.9	1.45[2]
76	■	**Brandon Sys** temporary tech personnel svcs	19.8	16.5	23	33.7	2.2	0	NA	7	20.0	0.82	8.8	0.80
77	47	**Duty Free Intl** duty free retail stores	19.8	14.5	33	94.2	12.4	12	8.66	18	201.7	1.21	15.2	1.29
78	■	**Graco** fluid-handling equip	19.7	20.2	14	298.1	15.4	37	1.11	18	125.9	2.13	8.2	2.22
79	■	**Lechters** specialty retail	19.7	16.3	33	168.8	9.4	26	1.21	12	84.1	1.38	8.5	1.53
80	■	**Value Merchants** wholesales close-out toys	19.7	14.4	31	98.4	3.9	2	0.43	9	53.5	0.83	10.5	1.13
81	99	**Superior Industries Intl** custom auto parts	19.6	21.0	21	252.7	16.2	88	1.28	16	136.7	1.87	8.5	1.97
82	56	**Legent** software	19.5	26.0	37	158.1	31.5	0	NA	17	372.0	1.46	11.8	1.58
83	■	**Rollins Environmental Svcs** waste disposal	19.5	18.8	12	191.5	25.6	4	NA	8	465.6	0.43	18.0	0.47
84	89	**McGrath RentCorp** sells & leases modular offices	19.2	24.5	26	46.4	8.3	0	NA	22	81.9	2.20	10.0	2.22
85	■	**Vencor** hospitals for chronically ill	19.2	8.6	54	63.8	1.4	55	1.73	12	68.7	0.25	48.0	0.44

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86	177	**Medstat Systems** software for health care inds	19.1%	22.3%	58%	$11.8	$1.4	10%	NA	9	$24.4	$0.51	18.1	$0.52
87	■	**Greenery Rehab Group** rehabilitation & nursing homes	18.9	20.8	15	91.4	7.4	88	NA	7	73.7	0.82	8.2	0.82
88	70	**BHA Group Cl A** air pollution control equip	18.8	18.1	41	68.4	4.9	6	2.48	14	83.9	0.75	18.0	0.84
89	■	**Jones Medical Inds** mfgr & distrib pharmaceuticals	18.8	25.7	29	16.8	2.1	54	0.99	11	48.3	0.61	18.6	0.64
90	86	**Tootsie Roll Industries** candy	18.8	19.3	18	183.6	21.2	0	1.54	36	349.6	2.19	16.6	2.35
91	■	**Advanced Telecomm** telecommunications	18.7	20.0	22	331.2	25.6	79	NA	16	325.8	1.16	13.4	1.34
92	■	**CPAC** photo chems & silver recovery	18.7	21.0	55	26.9	1.5	29	1.35	6	13.6	0.66	9.5	NA
93	90	**Luby's Cafeterias** cafeteria restaurants	18.7	19.7	11	311.4	32.1	2	0.61	17	458.3	1.17	14.3	1.18
94	■	**GZA GeoEnviron Tech** environ consulting & geotech svcs	18.6	12.0	18	33.7	2.7	1	NA	6	22.3	0.79	7.6	0.81
95	111	**FlightSafety Intl** air & marine training	18.4	21.1	21	255.9	71.1	10	NA	41	1,395.1	2.09	19.6	2.46
96	66	**American Travellers** insurance	18.3	28.7	19	64.2	9.0	0	NA	13	132.2	1.21	11.0	1.41
97	■	**Dycom Inds** telecomm & elec svcs for tel & util cos	18.1	31.0	52	166.7	9.6	7	NA	9	121.0	1.10	8.0	1.22[2]
98	■	**Mentor** medical devices & disposable prods	18.1	21.3	24	54.7	8.6	64	5.48	13	142.4	0.80	16.7	0.89
99	82	**Sbarro** Italian restaurants	18.1	23.0	37	170.3	16.6	0	1.03	23	308.5	1.24	18.5	1.45
100	■	**Williams-Sonoma** specialty retail	18.1	25.2	37	244.0	9.5	15	0.35	15	156.6	0.99	15.2	1.19
101	43	**New Line Cinema** movie production, distrib	18.0	26.9	10	110.4	6.1	0	0.48	7	58.5	0.71	10.0	1.00
102	■	**TriCare** health care evaluation svcs	18.0	16.0	60	24.5	1.8	2	NA	6	19.1	0.51	11.0	0.60
103	116	**Medicine Shoppe Intl** franchised pharmacies	17.9	21.6	26	32.0	8.5	0	NA	18	146.2	1.04	17.3	1.10
104	■	**Gainsco** property & casualty insurance	17.8	22.2	52	44.3	6.0	0	NA	7	41.8	0.95	7.1	1.03
105	88	**Aloette Cosmetics** cosmetics	17.6	19.8	20	21.7	3.9	2	7.08	12	34.1	1.35	8.6	1.50
106	151	**Gendex** medical & dental X-ray equip	17.6	19.9	73	30.0	2.6	44	1.25	11	37.3	0.83	12.7	0.95
107	84	**MS Carriers** trucking	17.6	18.2	26	110.1	8.5	39	NA	10	50.9	1.61	6.0	1.59
108	49	**Nichols Research** svcs technical military equip	17.6	20.6	24	74.9	3.8	0	NA	9	29.2	1.05	8.1	0.98

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109	■	**ADC Telecommunications** telecommunications equip	17.5%	19.6%	19%	$247.1	$21.7	4%	2.15	19	$245.6	$1.64	11.3	$1.67
110	130	**Buffets** buffet restaurants	17.5	24.9	50	133.2	7.1	14	0.54	16	150.4	0.75	21.3	0.85
111	117	**NYMagic** maritime insurance	17.5	18.3	26	90.6	20.4	0	NA	21	180.4	2.31	8.9	2.17
112	113	**Ryan's Fmly Steak Houses** cafeteria restaurants	17.5	18.8	36	262.3	23.9	0	0.05	5	275.0	0.45	11.7	0.48
113	115	**Cintas** uniform sales & rentals	17.4	20.8	22	295.0	27.8	28	1.35	41	573.6	1.96	20.7	2.23
114	■	**IPL Systems Cl A** computer equip	17.4	41.2	45	21.0	3.8	0	4.35	9	45.3	0.75	12.0	NA
115	118	**Stryker** specialty medical prods	17.2	19.1	23	250.6	21.4	2	2.07	23	533.2	0.91	24.7	0.99
116	139	**Tech-Ops Sevcon** speed controls for electric vehicles	17.2	21.7	30	15.7	1.5	0	2.12	7	12.3	0.84	8.6	NA
117	■	**BGS Systems** computer software	17.0	32.4	181	21.8	4.9	0	NA	19	55.2	1.57	11.8	1.69
118	119	**Intertrans** intl freight forwarding	17.0	27.1	26	117.0	5.4	0	1.93	13	61.5	1.05	12.1	1.09
119	154	**Pansophic Systems** software	16.9	22.9	13	227.7	28.8	1	NA	9	162.0	1.56	5.6	1.31
120	■	**Cerner** medical info svcs	16.7	11.3	31	55.1	3.2	6	1.85	7	25.5	0.84	8.3	0.97
121	57	**Werner Enterprises** trucking	16.7	16.1	22	282.3	18.0	47	NA	11	126.2	1.54	7.0	1.59
122	■	**EnClean** ind & environ cleaning svcs	16.5	20.5	37	52.6	2.1	98	1.77	11	46.7	0.67	16.6	0.83[2]
123	123	**Thermo Instrument Sys** radiation & pollution instruments	16.4	14.5	28	172.4	14.3	44	2.95	13	333.8	0.70	18.6	0.78
124	■	**FirstFed Financial** savings & loan	16.3	19.7	15	266.2	26.6	86	1.25	15	120.3	3.04	4.8	3.27
125	163	**Tuscarora Plastics** plastics	16.3	18.1	19	86.2	4.9	48	1.48	19	55.7	1.64	11.3	1.68
126	■	**Vicor** electric power systems	16.3	29.2	94	29.5	3.1	44	1.49	12	100.9	0.33	34.8	0.55
127	■	**HealthCare Compare** finl svcs for health care ind	16.2	8.6	37	34.5	3.2	1	3.7	20	114.6	0.55	35.9	0.79
128	■	**Tennant** floor care equip	16.2	21.1	15	206.4	15.6	3	1.29	28	137.2	3.13	8.9	3.08
129	131	**Harding Associates** hazardous waste consulting svcs	16.0	23.0	58	71.3	4.9	0	1.92	16	72.2	1.01	16.1	1.11
130	■	**Oregon Steel Mills** steel plate & pipe	15.9	22.7	199	266.3	25.4	6	1.09	17	267.3	1.60	10.5	1.95
131	■	**American Management Sys** management & tech consulting	15.8	15.5	13	239.2	10.1	21	NA	14	118.4	0.87	15.5	1.00

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132	114	**Arbor Drugs** drugstores	15.8%	21.0%	19%	$341.3	$11.0	57%	0.96	15	$138.2	$1.15	12.6	$1.35[2]
133	■	**Chambers Development** waste collection & disposal	15.8	14.4	48	226.1	31.7	85	2.42	18	969.7	0.59	30.1	0.68
134	148	**Myers Industries** tire svc equip, plastic parts	15.8	19.7	30	199.0	10.5	56	1.34	14	101.3	1.45	9.6	1.53
135	133	**Watts Industries Cl A** valves	15.7	16.2	18	291.8	27.7	38	2.03	35	435.0	2.18	15.8	2.52[2]
136	195	**JLG Industries** construction machinery	15.3	24.0	85	149.3	8.5	26	1.14	13	44.8	2.42	5.3	2.73[2]
137	■	**Solectron** printed circuit boards	15.3	38.4	53	204.7	7.4	49	1.25	9	51.1	1.26	6.9	1.42[2]
138	■	**LS Starrett** hand tools, measuring equip	15.2	14.7	10	201.6	18.8	16	1.96	19	75.3	2.71	7.1	NA
139	■	**Nellcor** patient-monitoring instruments	15.2	14.8	40	142.6	14.4	1	3.63	10	144.4	0.96	10.3	1.17[2]
140	■	**Spaghetti Warehouse**[3] Italian restaurants	15.1	34.9	38	37.2	2.9	78	0.38	16	49.6	0.93	16.8	1.20[2]
141	150	**Chili's** restaurants	15.0	23.1	26	347.1	18.1	51	0.65	26	300.6	1.66	15.9	2.02[2]
142	132	**G&K Services** linen rental	14.9	16.7	19	118.7	10.2	6	1.17	9	124.4	0.76	12.2	0.78
143	■	**Geodynamics** defense & intelligence software	14.9	15.7	14	54.1	3.7	0	NA	9	25.7	1.23	7.1	1.37
144	147	**SunGard Data Systems** computer svcs	14.9	16.1	27	224.8	18.7	15	NA	16	227.0	1.31	12.2	1.48
145	■	**Synetic** plastic prods	14.8	12.0	12	24.0	3.9	10	5.84	17	118.4	0.54	31.0	NA
146	■	**FlowMole** service underground cable & pipe	14.6	18.5	17	41.1	3.8	19	2.64	6	40.5	0.56	11.4	0.62
147	■	**Payco American** collection agency, billing svcs	14.6	19.6	13	102.5	4.8	1	NA	11	107.4	0.49	21.9	0.56
148	■	**Caere** information recognition software	14.5	17.1	24	23.7	4.9	0	13.22	17	85.3	1.05	16.2	1.15
149	■	**Analysis & Technology** military engineering svcs	14.4	14.5	14	99.2	3.6	20	NA	10	20.9	1.67	5.8	1.67
150	■	**Ben & Jerry's** ice cream	14.4	17.8	29	68.7	2.4	70	1.39	12	30.6	0.91	12.9	1.00
151	■	**Consilium** factory-floor software & svcs	14.4	22.4	130	29.9	5.2	0	NA	16	105.7	0.76	21.1	0.80
152	149	**Hooper Holmes** health care & health info svcs	14.4	16.2	14	88.3	2.8	19	NA	10	29.8	0.89	11.0	0.96
153	162	**Raymond James Financial** securities brokerage	14.4	23.5	19	256.6	16.9	39	1.04	15	82.5	2.96	5.0	2.65
154	172	**United Investors Mgmt** mutual fund adviser, insurance	14.2	18.1	28	248.5	60.0	0	NA	16	592.1	1.59	9.8	1.71

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155	157	**Uno Restaurant** pizza restaurants	14.1%	16.0%	63%	$52.9	$3.6	2%	1.19	11	$67.9	$0.44	24.4	$0.50
156	■	**Vallen** industrial safety & health prods	14.1	17.8	31	134.6	6.7	11	2.19	23	101.8	1.52	15.3	NA
157	■	**Maxim Integrated Prods** integrated circuits	13.9	20.2	125	56.0	7.6	13	1.26	8	97.4	0.58	14.0	0.79[2]
158	174	**Structural Dynamics Res** computer aided engineering	13.9	22.9	47	109.9	12.1	5	NA	17	213.1	0.89	18.8	0.93
159	■	**UniCare Financial** workers' comp insurance	13.8	26.0	70	84.1	8.1	0	NA	12	64.8	1.48	8.0	1.57
160	■	**BancTec** computerized document processing equip	13.7	15.6	49	189.5	10.9	49	1.05	13	80.3	1.64	7.8	1.88
161	159	**Quaker Chemical** specialty chemicals	13.7	15.1	18	190.9	13.7	6	2.11	13	122.4	1.45	9.0	1.50
162	160	**Unifirst** uniform rental svcs	13.7	17.2	14	221.6	13.8	66	0.89	15	153.7	1.35	11.2	1.36
163	■	**Medex** disposable medical prods	13.6	18.1	19	44.7	3.9	8	1.89	16	72.0	0.86	18.8	1.05[2]
164	■	**Micro Healthsystems** software for health care ind	13.5	23.1	116	8.5	1.1	0	2.68	13	26.0	0.59	22.5	NA
165	■	**Comair Holdings** regional airline	13.4	23.1	142	169.4	13.9	55	1.58	13	102.6	1.70	7.4	1.66
166	■	**Fidelity National Financial** title insurance	13.4	23.0	22	180.4	6.1	59	NA	11	32.9	1.78	5.9	1.62
167	■	**Intl Aluminum** aluminum bldg materials	13.4	14.1	20	212.1	14.8	3	2.67	22	95.0	3.30	6.5	3.50[2]
168	175	**Crown Books** bookstores	13.3	15.1	26	213.5	11.0	5	1.38	15	78.6	2.09	7.3	NA
169	■	**Weigh-Tronix** electronic scales	13.3	12.6	21	60.6	3.3	25	1.01	13	33.1	1.17	10.7	NA
170	187	**Met-Pro** filtration & fluid-handling equip	13.2	16.7	24	39.3	3.5	11	1.72	15	43.6	1.17	12.7	1.37
171	■	**Good Guys** consumer electronics retailer	13.0	24.9	20	267.4	6.9	25	0.46	15	78.9	1.49	10.2	1.52
172	171	**Harleysville Group** insurance	13.0	14.9	32	333.6	23.9	3	NA	15	115.1	3.07	4.7	3.12
173	■	**Raven Industries** electronics, plastics, clothing	13.0	20.7	20	89.6	4.4	19	1.16	11	33.5	1.39	7.8	1.50
174	192	**Applied Bioscience Intl** toxicological testing svcs	12.7	16.7	42	62.1	5.5	7	0.95	32	157.2	1.60	19.7	1.65
175	141	**Kent Electronics** distrib electronic prods	12.7	13.5	20	53.3	3.2	3	2.08	10	39.5	0.84	12.2	0.94
176	■	**Century Tel Enterprises** telephone co	12.6	10.6	10	237.7	27.2	100	1.03	23	703.3	0.87	26.4	0.93
177	179	**Colonial Cos Cl B**[3] insurance	12.5	13.5	15	284.5	31.3	1	0.25	17	226.0	2.07	8.3	NA

Stock prices as of Oct. 12. NA: Not available or applicable. [1]Current assets less inventories divided by current liabilities. [2]1991 estimate. [3]Formerly Colonial Life & Accident.

Sources: William O'Neil & Co.; Institutional Brokers Estimate System, via Lotus One Source.

The 200 Best Small Companies in America

Rank this year	Rank last year	Company/business	Return on equity 5-year average	Return on equity latest 12 mos	5-year EPS growth rate	Latest 12 mos sales (millions)	Latest 12 mos profits (millions)	Debt/ equity	Quick ratio[1]	Recent stock price	Market value (mil)	Latest 12 mos EPS	Latest 12 mos P/E	Est 1990 EPS
178	■	**Adaptec** computer equip	12.4%	19.1%	23%	$118.6	$15.6	2%	5.14	10	$94.0	$1.68	5.7	$1.93
179	■	**Fiserv** computer services	12.4	14.8	70	174.8	12.5	33	NA	21	179.2	1.46	14.5	1.60
180	■	**MBIA** municipal bond insurer	12.4	14.9	22	198.9	115.4	0	NA	20	760.5	3.08	6.5	3.39
181	■	**Ecology & Environ Cl A** environ consulting & testing	12.3	16.5	27	73.2	4.5	3	NA	12	47.2	1.13	10.6	1.15
182	■	**Gish Biomedical** disposable medical prods	12.3	23.6	76	18.2	1.5	3	2.76	12	30.8	0.52	22.4	0.58[2]
183	193	**Cracker Barrel Old Country** restaurants	12.2	18.0	40	225.6	15.3	20	1.13	20	273.5	1.07	18.2	1.29[2]
184	188	**Forest Labs** drugs	12.0	14.5	30	156.1	32.4	0	8.33	40	773.4	1.57	25.6	1.82
185	■	**Linear Technology** integrated circuits	12.0	19.4	83	75.6	11.3	15	3.79	9	151.8	0.67	13.8	0.88[2]
186	■	**OEA** airbag & other propellants	12.0	14.9	11	75.7	9.0	1	2.32	28	184.4	1.31	21.0	1.39
187	■	**Policy Mgmt Sys** software for insurance ind	11.9	11.5	17	306.0	32.8	36	NA	34	659.3	1.76	19.4	1.85
188	■	**Comshare** computer software & svcs	11.8	25.4	59	103.7	6.9	0	NA	15	80.7	1.26	12.2	1.62[2]
189	■	**Bytex** computer equip	11.2	15.6	39	42.4	4.5	1	5.04	7	40.2	0.74	9.0	0.81
190	■	**A&W Brands** soft drinks	10.8	19.6	120	116.4	11.6	55	0.61	25	226.8	1.26	19.8	1.40
191	■	**Vertex Communications** ground station satellite antennas	10.7	13.4	11	32.4	1.8	11	1.9	5	14.6	0.54	8.3	0.57
192	■	**Nichols Institute** clinical testing svcs	10.5	16.3	107	151.5	6.3	87	2.23	13	177.4	0.50	26.5	0.61
193	200	**Western Waste Inds** waste managment	10.5	15.0	19	172.0	9.7	84	1.22	16	205.2	0.78	20.4	0.91[2]
194	■	**Frederick's of Hollywood** retail & mail-order women's apparel	10.4	22.2	118	93.8	4.0	1	0.72	8	48.3	0.70	12.0	NA
195	■	**Sage Software** software for IBM mainframes	10.1	14.3	18	28.0	3.5	0	NA	10	60.6	0.56	17.4	0.75
196	■	**DFSoutheastern** savings & loan	9.9	8.8	13	252.7	12.5	78	1.27	7	31.3	2.69	2.5	2.34
197	■	**Healthcare Svcs Group** nursing home maintenance	9.8	17.6	17	60.1	4.8	31	6.51	16	90.0	0.96	16.1	1.08
198	■	**Selas** heat processing equip	9.8	36.3	78	64.5	4.4	25	1.14	10	30.4	1.95	5.0	2.00
199	■	**Alza** research controlled-delivery drugs	9.6	11.5	31	96.2	21.5	41	8.27	38	1,231.5	0.62	61.5	0.76
200	■	**New England Critical Care** home infusion therapy	9.3	15.0	55	103.9	10.4	4	8.27	21	257.1	0.80	26.3	0.94

Stock prices as of Oct. 12. NA: Not available or applicable. [1]Current assets less inventories divided by current liabilities. [2]1991 estimate.

Sources: William O'Neil & Co., Institutional Brokers Estimate System, via Lotus One Source.

Not doing too badly

The chief executives who run the big Forbes 500s companies (FORBES, *May 28*) make more money, but the people who head the 200 Best Small Companies in America don't do too badly either. The median salary plus bonus amounts to $278,500 (against $739,900 at the big companies). Gains from the exercise of options and other compensation such as car allowances, payment of insurance premiums and contributions to 401(k) savings plans raise median total compensation to $320,600. But more important than income to the small company chief executives is capital: Their holdings of stock in their companies total $4.2 billion, even in this depressed market; in this study, the median holding is worth $5.6 million.

Executive stock holdings were based on shares of beneficial interest, including stock held by an executive's wife or minor children, even if beneficial ownership was disclaimed. Excluded (where possible) were stock options, stock in which the executive shared control, shares held by foundations, by parents and by family members active in the business.

Chief executive Company	Age	Years with co	Years as CEO	Undergraduate college	College degrees	Compensation (000) salary + bonus	other	stock gains	total	Stock owned %	Stock owned mkt val (000)
M L Lowenkron **A&W Brands**	59	10	10			$483.2	—	—	$483.2	3.4%	$7,700
Samuel H Maslak **Acuson**	42	9	9	MIT MIT	BS PhD	500.0	—	—	500.0	6.1	52,782
John G Adler **Adaptec**	53	5	4	U of Mississippi Stanford	BS MBA	409.3	$5.7	$442.3	857.3	—	—
Charles M Denny Jr **ADC Telecommunications**	59	20	20	Stanford	BS	404.1	3.0	116.0	523.1	1.4	3,369
John E Warnock **Adobe Systems**	50	8	8	U of Utah U of Utah	BS PhD	320.6	—	—	320.6	3.5	13,478
Stephen E Raville **Advanced Telecommunications**	43	8	5	U of Virginia U of Georgia	BA JD	481.9	—	—	481.9	1.7	5,386
R L Nelson Jr[1] **Allwaste**	51	13	13	McNeese State	BS	257.0	—	—	257.0	2.6	5,460
Patricia J Defibaugh **Aloette Cosmetics**	44	12	12			195.5	20.2	—	215.7	25.5	8,690
Martin S Gerstel **Alza**	49	22	3	Yale Stanford	BS MBA	324.3	—	—	324.3	0.3†	3,847
Martin Lerner **American List**	57	25	25	Brooklyn Poly	BS	794.6	30.0	—	824.6	10.5	5,413
Charles O Rossotti **American Management Systems**	49	20	8	Georgetown Harvard	BA MBA	212.0	—	—	212.0	11.0	13,007
Rodger B Dowdell Jr **American Power Conversion**	41	5	5	Brown U of Rhode Island	BS MS	302.0	57.7	—	359.7	14.4	18,562
John A Powell **American Travellers**	46	28	2			401.7	70.5	81.3	553.5	2.9	3,835
A T Mollegen Jr **Analysis & Technology**	53	19	14	Yale	BS	190.7	14.3	68.2	273.2	4.1*	859
Frederick W Lang **Analysts Intl**	66	25	25	U of Minnesota	BBA BSEE	242.0	169.4	—	411.4	4.0*	2,109
Kenneth H Harper **Applied Bioscience Intl**	59	3	3	U of Manchester U of London	BS PhD	271.8	—	—	271.8	—	—

Stock prices as of Oct 12. *Includes family holdings. †Multiple stock classes have been combined. [1]Clayton K Trier is co-CEO.

The 200 Best Small Companies' Chief Executives

Chief executive Company	Age	Years with co	Years as CEO	Undergraduate graduate college	College degrees	Compensation (000) salary + bonus	other	stock gains	total	Stock owned %	mkt val (000)
Eugene Applebaum **Arbor Drugs**	53	27	27	Wayne State	BS	$450.0	—	—	$450.0	53.7%	$74,212
F Sheridan Garrison **Arkansas Freightways**	56	8	8	U of Arkansas	BA	150.0	$3.0	—	153.0	55.0	51,185
Alvar J Green **Autodesk**	44	6	4	Eastern Michigan	BBA	280.6	—	$530.0	810.6	—[1]	323
Dale H Ballard **Ballard Medical Products**	67	12	12	U of Utah	BS	130.9	—	—	130.9	14.1*	19,077
Grahame N Clark Jr **Banctec**	47	10	3	U of Nebraska SMU	BA MBA	321.0	64.0	121.5	506.5	—[1]	17
Richard W Heath **BeautiControl Cosmetics**	48	10	10			515.9	—	—	515.9	20.0	14,126
Fred E Lager[2] **Ben & Jerry's Homemade**	36	8	2	U of Vermont USC	BA MBA	81.0	1.7	—	82.7	2.6	804
Harold S Schwenk Jr **BGS Systems**	49	14	14	Brown Harvard	BS PhD	304.5	6.8	—	311.3	20.6	11,342
Michael T Zak **BHA Group**	40	10	4			162.8	—	—	162.8	0.1†	101
Dane A Miller **Biomet**	44	13	13	General Motors Inst U of Cincinnati	BS PhD	211.6	—	—	211.6	5.5*	39,507
Max P Watson Jr **BMC Software**	44	5	1	Louisiana Tech	BBA	459.7	—	—	459.7[3]	0.5	1,956
Johannes S Bruggeling **Boole & Babbage**	45	12	2			343.5	—	—	343.5	3.0	1,284
Francis L Reed **Boston Acoustics**	57	11	11	Boston College	BA	258.0	—	—	258.0	15.8	5,740
Ira B Brown **Brandon Systems**	63	22	22	Merchant Marine Acad Drexel	BS MS	387.5	—	—	387.5	47.1	9,421
Allan L Bridgford **Bridgford Foods**	55	33	15	Stanford	BA	92.8	237.9	—	330.7	17.2	10,782
Roe H Hatlen **Buffets**	47	7	7	Pacific Lutheran Oregon U	BA MBA	156.7	—	—	156.7	7.3*	10,904
Jeffery S Goodman **Bytex**	43	3	3	Old Dominion U of Virginia	BS MBA	221.3	—	—	221.3	0.4	178
S Robert Levine **Cabletron Systems**	32	8	8	U of Miami	BS	1,039.4	—	—	1,039.4	35.8	165,716
Joseph B Costello **Cadence Design Systems**	36	6	2	Harvey Mudd Yale	BS MS	514.4	—	—	514.4	0.6	2,478
Robert G Teresi **Caere**	49	14	5	U of Santa Clara U of Santa Clara	BSC MBA	210.3	—	345.9	556.2	1.3	1,136
Thomas A McConomy **Calgon Carbon**	57	35	5	Carnegie-Mellon	BS	416.2	—	—	416.2	12.6	84,347
Clarke M Williams Jr **Century Tel Enterprises**	68	22	7	Northeast Jr Coll	BBA	522.1	179.7	1,368.1	2,069.9	0.1	495
Neal L Patterson **Cerner**	40	11	11	Oklahoma State Oklahoma State	BS MBA	127.5	0.6	—	128.1	13.4	3,431

Stock prices as of Oct 12. *Includes family holdings. †Multiple stock classes have been combined. [1]Holdings less than 0.1%. [2]On Jan. 1, 1991 Ben Cohen will become chief executive officer. [3]Became CEO April 1990. Salary is for office of vice president and chief operating officer.

The 200 Best Small Companies' Chief Executives

Chief executive Company	Age	Years with co	Years as CEO	Undergraduate college	College degrees	Compensation (000) salary + bonus	other	stock gains	total	Stock owned %	Stock owned mkt val (000)
John G Rangos Sr **Chambers Development**	61	19	19	•		$386.5	—	—	$386.5	39.4%*†	$382,427
Norman E Brinker **Chili's**	59	7	7	San Diego State U	BS	602.9	—	—	602.9	4.3	12,908
Richard T Farmer **Cintas**	55	33	22	Miami U (Ohio)	BA	337.4	$326.4	—	663.8	35.0	200,536
John P Morgridge **Cisco Systems**	57	2	2	U of Wisconsin Stanford	BBA MBA	180.1	—	—	180.1	5.0	13,263
Gayle O Averyt **Colonial Companies**	57	32	20	Davidson College Harvard	BS MBA	205.0	5.1	—	210.1	10.0†	22,642
David R Mueller **Comair Holdings**	38	13	7	U of Cincinnati	BA	371.8	1.9	$27.1	400.8	7.8*†	8,041
Richard L Crandall **Comshare**	47	24	20	U of Michigan U of Michigan	BS MS	446.3	23.5	1,775.0	2,244.8[1]	5.4	4,359
Dan M Palmer **Concord Computing**	47	5	1	Memphis State U	BA	170.0	—	—	170.0	—	—
Thomas Tomasetti **Consilium**	46	3	3	U of Lowell	BS	202.1	—	219.9	422.0	2.0	2,147
Thomas N Hendrickson **CPAC**	48	21	21	U of Wisconsin U of Rochester	BA MCE	364.0	4.2	—	368.2	10.4	1,412
Dan W Evins **Cracker Barrel Old Country Store**	55	21	21			424.1	19.3	—	443.4	2.5	6,729
Robert M Haft **Crown Books**	38	13	13	U of Pennsylvania Harvard	MS MBA	1,549.0	27.0	—	1,576.0	4.7[2]	3,706
Jack Farber **CSS Industries**	57	11	11	U of Pennsylvania	BS	475.0	20.7	—	495.7	47.8[3]	37,027
Robert C McMahan **DFSoutheastern**	50	21	2	U of Tennessee	BA	239.4	16.7	—	256.1	0.4	130
William H Gibbs **DH Technology**	46	5	5	U of Arkansas	BS	446.4	—	—	446.4	1.9	650
Sigi Ziering **Diagnostic Prods**	62	18	17	Brooklyn College Syracuse	BS MS, PhD	346.0	—	—	346.0	20.9*	75,294
John P Schinas **Digi International**	53	5	5	U of Texas Northeastern	BS MS	236.8	—	—	236.8	24.1	11,160
William E Gibson **Digital Microwave**	50	7	7	U of Notre Dame U of Notre Dame	BS MBA	162.7	—	—	162.7	6.5	9,001
Michael L Darland **Digital Systems Intl**	48	10	10	U of Washington U of Washington	BA MA	304.2	1.5	—	305.7	20.7*	19,105
John A Couri **Duty Free Intl**	49	8	8	Syracuse	BA	425.0	—	—	425.0	7.5[4]	15,080
Thomas R Pledger **Dycom Inds**	52	6	6			312.0	—	—	312.0	2.2*	2,661
Gerhard J Neumaier **Ecology & Environment**	53	20	20	General Motors Inst U of Buffalo	BME MA	212.0	—	—	212.0	22.9	10,793
William M Hawkins III **Electronic Arts**	36	8	8	Harvard Stanford	BA MBA	258.6	76.6	—	335.2	10.7	7,750

Stock prices as of Oct 12. *Includes family holdings. †Multiple stock classes have been combined. [1]For fiscal year ending June 30, 1989. [2]Most shares owned indirectly through Robert M Haft's interest in Dart Group, which owns 53.5% of Crown Books. [3]Includes ownership through Philadelphia Industries. [4]Stockholdings include CEO's proportional interest in IDF Services.

The 200 Best Small Companies' Chief Executives

Chief executive Company	Age	Years with co	Years as CEO	Undergraduate graduate college	College degrees	Compensation (000) salary + bonus	other	stock gains	total	Stock owned %	mkt val (000)
Malcolm Waddell **EnClean**	38	8	8	Rice Harvard	BA MBA	$123.5	—	—	$123.5[1]	5.6%	$2,601
Peter J Rose **Expeditors Intl of Washington**	47	9	2			390.3	$0.8	—	391.1	5.0*	4,631
Robert A Kierlin **Fastenal**	51	23	23	U of Minnesota U of Minnesota	BS MA	120.0	—	—	120.0	19.6	32,541
William P Foley II **Fidelity National Finl**	45	9	9	West Point Seattle U	BS MBA	817.7	—	—	817.7	34.5	11,356
William S Mortensen **FirstFed Financial**	57	35	21	USC	BA	454.6	—	—	454.6	1.0	1,224
George D Dalton **Fiserv**	62	6	6	Northwestern	BBS	297.8	14.2	$27.0	339.0	1.7	3,078
Albert L Ueltschi **FlightSafety Intl**	73	39	39			298.9	—	—	298.9	34.8	485,407
John R Potter **FlowMole**	45	7	3	Harvard MIT	BA MS	248.6	638.2	—	886.8	2.2	885
Howard Solomon **Forest Labs**	63	13	13	CCNY Yale	BS LLB	340.2	10.5	—	350.7	1.7	12,896
James W Kennedy **Forschner Group**	40	15	2	Fordham	BA	278.1	3.8	—	281.9	—[5]	—
Charles B Johnson **Franklin Resources**	57	33	19	Yale	BA	452.4	18.2	—	470.6	20.6	196,139
George W Townson **Frederick's of Hollywood**	49	5	5			323.3	—	—	323.3[2]	—	—
Walter A Rhulen **Frontier Insurance Group**	59	28	28	U of Connecticut	BS	207.3	12.0	—	219.3	16.2†	13,636
Richard Fink **G&K Services**	60	26	20	U of Minnesota Oxford	BA BPhil	286.2	16.0	—	302.2	8.3†	10,345
Joseph D Macchia **Gainsco**	55	12	12	Fairfield	BS	380.4	15.3	—	395.7	12.6	5,243
John J McDonough **Gendex**	54	7	7	U of Notre Dame	BS	239.0	—	—	239.0	33.1	12,350
Robert L Paulson **Geodynamics**	53	1	1	Michigan Tech Inst Air Force Inst of Tech	BS MS	179.3	19.4	—	198.7	0.1	26
Jack W Brown **Gish Biomedical**	50	10	10	U of Iowa	BA	176.4	—	171.0	347.4	2.1	650
David C Wetmore **Goal Systems Intl**	42	2	1	U of Notre Dame Ohio State	BBA MBA	331.1	8.9	—	340.0[3]	0.1	145
Ronald A Unkefer **Good Guys**	46	17	14	Cleveland State U	BA	260.4	2.8	—	263.2	41.3	32,594
David A Koch **Graco**	60	34	28	St Thomas College	BA	423.1	97.5	—	520.6	31.5	39,692
Gerard M Martin **Greenery Rehabilitation Group**	56	14	14			280.3	6.0	—	286.3	52.9*	38,979
Robert S Bowen **Group 1 Software**	52	7	4	Northwestern Harvard	BS MBA	608.8	—	—	608.8[4]	0.3	63

Stock prices as of Oct 12. *Includes family holdings. †Multiple stock classes have been combined. [1]For fiscal year ended June 1989. [2]Compensation for year ended August 1989. [3]Became chief executive officer February 1990. Salary is for office of president and chief operating officer. [4]CEO compensated by Comnet, which owns 82.9% of firm's stock. [5] Less than 0.01%.

The 200 Best Small Companies' Chief Executives

Chief executive Company	Age	Years with co	Years as CEO	Undergraduate graduate college	College degrees	Compensation (000) salary + bonus	other	stock gains	total	Stock owned %	mkt val (000)
Donald T Goldberg **GZA GeoEnvironmental Tech**	62	26	26	Tufts MIT	BA MBA	$237.1	$27.6	—	$264.7	11.0%	$2,446
Richard P Prezio **Harding Associates**	45	8	2	Bentley Coll (Mass)	BS	265.4	—	—	265.4	—[1]	21
Bradford W Mitchell **Harleysville Group**	63	14	12	U of Maine Boston U	 LLB	377.4	—	—	377.4	0.1	75
James C Smith **Healthcare Compare**	49	6	6	Northeastern	BA	367.2	—	—	367.2	4.6	5,297
Daniel P McCartney **Healthcare Svcs Group**	39	14	14	Villanova	BS	196.7	—	—	196.7	9.3	8,362
Russell A Gerdin **Heartland Express**	49	12	12	Moorhead State	BA	300.0	—	—	300.0	64.0	52,784
Stanley G Peschel **Hipotronics**	60	28	28	Union College	BSE	211.0	—	—	211.0	9.5	3,083
Kent H Kerkhof **Home Nutritional Svcs**	41	3	1	Butler U Butler U	BS MS	149.5	0.5	$17.0	167.0	—	—
James M McNamee **Hooper Holmes**	45	22	6	Regis College Fairleigh Dickinson	BS MBA	192.5	—	—	192.5	0.6	175
Narendra K Gupta **Integrated Systems**	42	10	10	Calif Inst of Tech Stanford	MS PhD	139.8	—	—	139.8	41.5*	28,056
Cornelius C Banderstar **Intl Aluminum**	75	33	33			209.9	7.9	—	217.8	38.5*	36,608
Michael P Sullivan **Intl Dairy Queen**	55	17	3	Marquette U of Minnesota	BS JD	442.2	—	—	442.2	0.2†	1,040
Ralph R Weiser **Intl Recovery**	65	6	6	NYU Harvard	BA JD	427.8	—	—	427.8	7.4	3,713
M Keith McKinney Jr **Intertrans**	46	12	1	Louisiana Tech	BA	156.4	—	—	156.4[2]	8.3	5,082
Robert W Norton **IPL Systems**	45	14	5	U of Massachusetts	BS	99.5	—	—	99.5	0.1*	30
John L Grove **JLG Industries**	69	21	21			400.0	7.6	—	407.6	19.7	8,795
Terence S Malone **Johnson Worldwide Associates**	60	34	6	Dartmouth Dartmouth	BA MBA	393.5	31.6	—	425.1	0.8†	1,273
Dennis M Jones **Jones Medical Inds**	52	9	9			142.8	12.6	—	155.4	32.2	15,566
Robert S Fremont **Juno Lighting**	65	15	15	NYU	BA	394.0	30.0	—	424.0	13.0	16,473
Lawrence J Cawley **Kaydon**	56	5	3	Cleveland State	BME	187.1	257.5	—	444.6	0.3	690
John F Keane **Keane**	59	25	25	Harvard Harvard	BA MBA	194.8	3.6	—	198.4	41.6†	25,525
Morrie K Abramson **Kent Electronics**	55	16	16	U of Houston	BA	371.7	6.4	—	378.1	9.4	3,706
Bernard Kalish **Lawson Products**	53	34	1			230.0	22.4	—	252.4[3]	—[1]	80

Stock prices as of Oct 12. *Includes family holdings. †Multiple stock classes have been combined. [1]Holdings less than 0.1%. [2]Became CEO on Jan. 30, 1990. Compensation earned as executive vice president and director. [3]Annualized salary.

The 200 Best Small Companies' Chief Executives

Chief executive Company	Age	Years with co	Years as CEO	Undergraduate college	College degrees	Compensation (000) salary + bonus	other	stock gains	total	Stock owned %	mkt val (000)
Donald Jonas **Lechters**	61	15	15			$60.0	$33.2	—	$93.2	34.0%*	$28,625
Joe M Henson **Legent**	57	1	1	U of Arkansas	BA	500.0	—	—	500.0[1]	—	—
Robert W Lindal **Lindal Cedar Homes**	43	21	9	U of British Columbia	BE	153.1	3.5	—	156.6	10.5	1,398
Gary D Parker **Lindsay Manufacturing**	45	19	6	Nebraska Wesleyan	BS	250.0	15.0	$220.0	485.0	0.7	310
Robert H Swanson Jr **Linear Technology**	52	9	9	Northeastern	BS	269.1	—	—	269.1	3.2	4,914
Samuel B Davis **Liqui-Box**	47	27	8	Ohio State	BA	875.9	10.1	1,154.3	2,040.3	12.1*	15,195
Ralph Erben **Luby's Cafeterias**	59	30	1	Baylor	BA	258.4	9.6	—	268[2]	0.5	2,266
Joseph F Gloudeman **MacNeal-Schwendler**	55	12	5	Marquette U of Stuttgart	BS MS, Dr Ing	333.0	27.0	—	360.0	3.4	2,768
John F Gifford **Maxim Integrated Prods**	49	7	7	UCLA	BS	357.0	—	—	357.0	2.6	2,498
William O Bailey **MBIA**	64	3	3	Dartmouth College U of Pennsylvania	BA MBA	720.0	426.8	—	1,146.8	—[3]	300
Robert P McGrath **McGrath RentCorp**	57	11	11	U of Notre Dame	BS	293.7	53.4	—	347.1	33.9	27,749
Craig Waldbillig **Medex**	64	31	19	Boston U	BS	183.0	5.8	—	188.8[4]	13.2*	9,523
David A Abrahamson **Medicine Shoppe Intl**	51	5	1	U of Illinois Harvard	BS MBA	147.4	3.1	80.0	230.5[5]	0.1	121
Ernest G Ludy **Medstat Systems**	44	9	9	U of Detroit U of Detroit	BA MA	228.8	—	—	228.8	32.1	7,805
James W Crook **Melamine Chemicals**	60	18	3	Mississippi State U	BS	134.1	4.4	—	138.5	0.3	127
Christopher J Conway **Mentor**	51	21	21			302.8	—	—	302.8	4.0	5,664
John E Reed **Mestek**	74	46	46	Yale Northeastern	BA LLB	559.3	15.2	—	574.5	36.8*	17,643
Walter A Everett **Met-Pro**	68	24	24			700.8	—	—	700.8	0.5	207
Salvatore M Caravetta **Micro Healthsystems**	64	19	19	Penn State	BA	149.0	—	—	149.0	37.7*	9,810
William N Mayer **Modern Controls**	60	19	3	U of Wisconsin	BS	217.0	1.1	54.4	272.5	3.5	1,422
Michael S Starnes **MS Carriers**	45	13	4	U of Mississippi	BBA	332.3	63.0	—	395.3	34.4	17,489
Stephen E Myers **Myers Industries**	46	27	6	Harvard	BA	190.0	6.0	5.7	201.7	9.1	9,237
O Gene Bicknell **National Pizza**	58	28	28			314.6	6.0	—	320.6	56.0	137,497

Stock prices as of Oct 12. *Includes family holdings. [1]Became CEO November 1989; annualized figure. [2]Appointed CEO January 1990. Salary is for serving as chief operating officer and president. [3]Holdings less than 0.1%. [4]For fiscal year ended June 1989. [5]Became CEO May 1990. Salary is for office of senior vice president.

The 200 Best Small Companies' Chief Executives

Chief executive Company	Age	Years with co	Years as CEO	Undergraduate graduate college	College degrees	Compensation (000) salary + bonus	other	stock gains	total	Stock owned %	mkt val (000)
C Raymond Larkin Jr **Nellcor**	42	7	1	LaSalle College	BS	$353.8	$16.7	—	$370.5	0.7%	$981
Patrick S Smith **New England Critical Care**	38	9	9	John Carroll U	BS	387.4	—	—	387.4	2.7	6,932
Robert Shaye **New Line Cinema**	51	23	23	U of Michigan Columbia	BA JD	600.0	3.9	—	603.9	28.6	17,332
Albert L Nichols **Nichols Institute**	56	20	20	Loyola U Marquette U	BS MD	835.3	—	—	835.3	19.4	34,451
Chris H Horgen **Nichols Research**	43	14	14	Iowa State USC	BS MS	205.7	—	—	205.7	13.8	4,032
Mark W Blackman **NYMagic**	39	13	2	Stanford Stanford	BA JD	—	—	—	—[1]	19.3[2]	34,803
Ahmed D Kafadar **OEA**	75	33	33	Colo School of Mines Colo School of Mines	EM MEM	278.8	—	—	278.8	14.0*	25,850
Thomas B Boklund **Oregon Steel Mills**	51	17	5	Tri-State College	BS	402.5	18.3	—	420.8	1.0	2,563
Charles F Hyde **Oshkosh B'Gosh**	70	42	24	Wesleyan U	BA	571.8	59.4	—	631.2	2.9*†	9,168
David J Eskra **Pansophic Systems**	49	11	6	St Mary's (Winona)	BA	385.0	4.2	—	389.2	0.9	1,490
William A Inglehart **Payco American**	58	2	1	U of Arizona	BA	202.0	2.2	—	204.2	—[3]	23
Irving Levit **Penn Treaty American**	61	19	19			152.8	—	—	152.8[4]	35.3	12,307
John F Cogan Jr **Pioneer Group**	64	28	27	Harvard Harvard	BS JD	460.9	0.2	—	461.1	16.8	17,283
G Larry Wilson **Policy Management Sys**	44	24	9	U of South Carolina U of South Carolina	BS MBA	506.9	158.8	—	665.7	0.5	3,129
David J McDonnell **Preferred Health Care**	48	6	2	St Mary's (Baltimore) U of Pennsylvania	BA DSW	200.0	—	$215.1	415.1	1.4	1,154
Peter A Benoliel **Quaker Chemical**	58	33	24	Princeton	BA	293.0	27.7	—	320.7	9.2	11,284
David A Christensen **Raven Industries**	55	28	19	S Dakota State U	BS	315.0	23.2	—	338.2	3.2*	1,054
Thomas A James **Raymond James Financial**	48	24	21	Harvard Harvard	BA MBA	624.7	30.0	—	654.7	33.4	27,583
Gerald E McGinnis **Respironics**	56	19	19	U of Illinois U of Pittsburgh	BS MS	175.0	24.6	—	199.6[5]	14.4	6,768
John W Rollins **Rollins Environmental Svcs**	74	22	2			360.0	—	—	360.0	7.7	35,837
Charles D Way **Ryan's Family Steak Houses**	37	11	1	Clemson	BS	125.5	—	—	125.5	0.6	1,725
Steven J Halmos **SafeCard Services**	42	21	3	Georgia Tech Georgia Tech	BS MBA	2,660.3	17.4	—	2,677.7[6]	5.9	9,305
Kevin J Burns **Sage Software**	41	8	4	Ohio State U U of Colorado	BS MBA	218.4	—	—	218.4	3.6	2,203

Stock prices as of Oct 12. *Includes family holdings. †Multiple stock classes have been combined. [1]Compensation is from a management consulting pool, amount indeterminate. [2]Indirect ownership through CEO's 50% ownership of three insurance companies that have interest in NYMagic. [3]Holdings less than 0.1%. [4]CEO also receives commissions from the Irv Levit Insurance Management Corp. [5]For fiscal year ended June 30, 1989. [6]CEO not compensated directly by company.

The 200 Best Small Companies' Chief Executives

Chief executive Company	Age	Years with co	Years as CEO	Undergraduate graduate college	College degrees	Compensation (000) salary + bonus	other	stock gains	total	Stock owned %	mkt val (000)
Lawrence A Lemkuhl **St Jude Medical**	53	5	5	U of Iowa	BBA	$377.3	$27.4	—	$404.7	0.3%	$3,108
Henry B Pearsall **Sanford**	56	21	3	Amherst U of Michigan	BA JD	571.0	—	—	571.0	4.7	15,503
Mario Sbarro **Sbarro**	48	13	6			279.4	—	—	279.4	11.3	34,921
Marvin W Ozley **Sealright**	56	24	2	Southwest Missouri	BS	265.9	4.7	—	270.6	1.7	2,918
Gary R Christophersen **Seattle FilmWorks**	44	9	2	Whitman College U of Washington	BA MBA	153.1	—	—	153.1	4.5	499
Stephen F Ryan **Selas**	55	2	2	Iona College U of Connecticut	BBA MBA	187.5	—	—	187.5	—[1]	4
Kenneth A Williams **Sierra On-Line**	36	10	10			254.1	—	—	254.1	19.4*	8,511
Fred M Gibbons **Software Publishing**	41	10	10	U of Michigan Harvard	BS MBA	265.0	35.6	—	300.6	5.5	11,119
Winston H Chen **Solectron**	49	12	6	Natl Cheng Kung U Harvard	BS MS, PhD	233.1	—	—	233.1	14.0	7,181
Phinn W Townsend **Southern Mineral**	63	6	3			127.5	—	—	127.5	0.4	80
Robert R Hawk **Spaghetti Warehouse**	63	18	18	Oregon State College	BS	182.0	—	—	182.0	13.5	6,680
Douglas R Starrett **LS Starrett**	70	38	38			237.4	23.6	$8.1	269.1	4.6	3,462
Ronald J Friedman **Structural Dynamics Research**	47	4	4	NYU	BS	428.5	2.5	37.5	468.5	0.3	704
John W Brown **Stryker**	56	14	14	Auburn	BS	390.0	21.6	—	411.6	4.8	25,538
Robert J Sullivan **Sullivan Dental Products**	60	10	10			258.1	1.5	—	259.6	27.5	14,117
James L Mann **SunGard Data Systems**	56	8	8	Wichita State	BS	382.4	6.0	—	388.4	0.7	1,502
Louis L Borick **Superior Industries Intl**	66	33	33			925.0	—	—	925.0	23.5*	32,118
Martin J Wygod **Synetic**	59	7	7			81.3	62.8	—	144.1[2]	3.1	3,618
Roger E Covey **System Software Associates**	36	9	9	U of Illinois U of Chicago	BS MBA	235.0	—	—	235.0	35.0	56,700
Thomas E Haire **T2 Medical**	46	7	7	Central Michigan U	BS	257.5	18.1	1,793.9	2,069.5	2.1	5,141
Thomas M Fulton **Tech-Ops Landauer**	56	12	3	Dartmouth	BA	221.3	—	—	221.3	1.5	1,633
Bernard F Start **Tech-Ops Sevcon**	52	13	3	SE London Tech Coll	BA	196.3	—	—	196.3	2.4	289
Victor A Rocchio **Technalysis**	63	23	23	U of Minnesota	BA	318.5	—	—	318.5	15.1	2,681

Stock prices as of Oct 12. *Includes family holdings. [1]Holdings less than 0.1%. [2]For fiscal year ending June 1989. Compensated by Medco Containment Services, which owns 73.5% of Synetic.

The 200 Best Small Companies' Chief Executives

Chief executive Company	Age	Years with co	Years as CEO	Undergraduate graduate college	College degrees	Compensation (000) salary + bonus	other	stock gains	total	Stock owned %	mkt val (000)
Roger L Hale **Tennant**	55	29	14	Brown Harvard	BA MBA	$473.8	$46.1	—	$519.9	3.6%	$4,948
Arvin H Smith **Thermo Instrument Systems**	61	20	4	TCU	BS	120.0	—	—	120.0[1]	0.2[2]	541
Melvin J Gordon **Tootsie Roll Industries**	70	38	28	Harvard Harvard	AB MBA	582.5	30.0	—	612.5	19.0*†	66,533
Richard W Ussery **Total System Services**	43	25	8	Auburn	BA	220.0	30.0	—	250.0	0.1	762
Robert J Higgins **Trans World Music**	49	17	17			1,038.6	86.7	—	1,125.3	67.2	106,514
Stephen F Bullock **TriCare**	37	5	5	U of Arizona	BS	210.0	—	—	210.0	6.8*	1,294
John P O'Leary Jr **Tuscarora Plastics**	43	19	1	Gettysburg College U of Pennsylvania	BA MBA	183.3	0.9	—	184.2[3]	1.6	868
Ralph W Leatherby **UniCare Finl**	65	11	11	Iowa Wesleyan	BA	153.2	3.1	—	156.3	60.0*	38,850
Aldo A Croatti **Unifirst**	72	50	40			228.0	19.6	—	247.6	52.4	80,497
Jon W Rotenstreich **United Investors Mgmt**	47	7	4	Univ of Alabama	BS	405.7	15.0	—	420.7[4]	0.1	720
Aaron D Spencer **Uno Restaurant**	59	11	11	Boston U	BS	175.8	—	—	175.8	59.1	40,146
William Dean Wallace **Utah Medical Products**	43	7	4	Brigham Young U of Utah	BS MD, PhD	160.6	—	—	160.6	4.2	2,701
JM Wayne Code **Vallen**	60	5	5	U of Saskatchewan	BS	250.1	9.6	$1,406.3	1,666.0	1.7	1,744
Steven J Appel **Value Merchants**	48	1	1	U of Wisconsin	BBA	200.0	—	—	200.0[5]	—	—
W Bruce Lunsford **Vencor**	43	5	5	U of Kentucky Northern Kentucky U	BA JD	219.4	—	—	219.4	17.0	11,705
J Rex Vardeman **Vertex Communications**	51	6	6	Texas Tech SMU	BS MS	172.0	—	—	172.0	9.6	1,404
Patrizio Vinciarelli **Vicor**	44	9	9	U of Rome	PhD	100.0	7.7	—	107.7	60.6†	61,157
Elliot K Knutson **Washington Fed S&L**	66	28	7			277.9	40.1	—	318.0	1.6	8,182
Timothy P Horne **Watts Industries**	52	31	12	Trinity College	BA	579.2	—	—	579.2	11.9	51,905
Richard S Bradley **Weigh-Tronix**	62	18	9			190.3	14.7	—	205.0	0.9	284
Clarence L Werner **Werner Enterprises**	53	34	34			539.9	—	—	539.9	48.2	60,824
Kosti Shirvanian **Western Waste Inds**	60	35	35			549.2	—	—	549.2	38.6	79,307
W Howard Lester **Williams-Sonoma**	55	12	12	U of Oklahoma	BA	228.5	—	—	228.5	14.0	21,872

Stock prices as of Oct 12. *Includes family holdings. †Multiple stock classes have been combined. [1]Chief executive is paid by Thermo Electron. Figures are for fiscal year ended July 1989. [2]Includes shares owned through Thermo Electron. [3]Salary as president of company, became CEO Jan. 1, 1990. [4]CEO is compensated by Torchmark, which owns 84.5% of company. [5]Pay reflects position of president.

Company Directory

To find out more about the 200 best small companies in America, use the alphabetical directory below, which tells how they rank by return on equity, sales, profits and market value, and how to contact them. Use the 5-year return on equity ranking to find a company in the tables on page 242.

			Where they rank					
Company	Exch	Ticker symbol	5-year average ROE	sales	profits	market value	City, state	Telephone
A&W Brands	o	SODA	190	88	78	47	White Plains, NY	914-397-1700
Acuson	n	ACN	43	25	8	6	Mountain View, CA	415-969-9112
Adaptec	o	ADPT	178	85	54	104	Milpitas, CA	408-945-8600
ADC Telecommunications	o	ADCT	109	30	37	44	Bloomington, MN	612-835-6800
Adobe Systems	o	ADBE	7	72	9	26	Mountain View, CA	415-961-4400
Advanced Telecommunications	o	ATEL	91	4	27	33	Atlanta, GA	404-261-5885
Allwaste	o	ALWS	17	46	63	50	Houston, TX	713-623-8777
Aloette Cosmetics	o	ALET	105	186	155	173	Malvern, PA	215-644-8200
Alza	a	AZA	199	101	38	3	Palo Alto, CA	415-494-5000
American List	a	AMZ	16	200	148	144	Great Neck, NY	516-466-0602
American Management Sys	o	AMSY	131	32	89	91	Arlington, VA	703-841-6000
American Power Conversion	o	APCC	13	148	109	81	West Kingston, RI	401-789-5735
American Travellers	o	ATVC	96	130	97	80	Warrington, PA	215-343-1000
Analysis & Technology	o	AATI	149	99	164	190	North Stonington, CT	203-599-3910
Analysts Intl	o	ANLY	75	94	125	143	Minneapolis, MN	612-835-2330
Applied Bioscience Intl	o	APBI	174	133	131	66	East Millstone, NJ	201-873-2550
Arbor Drugs	o	ARBR	132	2	81	75	Troy, MI	313-643-9420
Arkansas Freightways	o	AFWY	25	86	120	106	Harrison, AR	501-741-9000
Autodesk	o	ACAD	34	42	7	7	Sausalito, CA	415-332-2344
Ballard Med Products	o	BMED	37	174	128	78	Midvale, UT	801-566-4693
BancTec	o	BTEC	160	53	83	119	Dallas, TX	214-450-7700
BeautiControl Cosmetics	o	BUTI	18	145	127	129	Dallas, TX	214-458-0601
Ben & Jerry's Homemade	o	BJICA	150	126	183	180	Waterbury, VT	802-244-5641
BGS Systems	o	BGSS	117	185	140	141	Waltham, MA	617-891-0000
BHA Group	o	BHAGA	88	127	139	113	Kansas City, MO	816-356-8400
Biomet	o	BMET	74	62	15	10	Warsaw, IN	219-267-6639
BMC Software	o	BMCS	3	98	36	25	Sugar Land, TX	713-240-8800
Boole & Babbage	o	BOOL	48	105	129	163	Sunnyvale, CA	408-735-9550
Boston Acoustics	o	BOSA	51	177	165	170	Lynnfield, MA	617-592-9000
Brandon Systems	o	BRDN	76	164	185	192	Secaucus, NJ	201-392-0800
Bridgford Foods	o	BRID	68	115	156	135	Anaheim, CA	714-526-5533
Buffets	o	BOCB	110	80	112	70	Eden Prairie, MN	612-942-9760

a: American Stock Exchange. n: New York Stock Exchange. o: over-the-counter.

Company Directory

Company	Exch	Ticker symbol	Where they rank: 5-year average ROE	sales	profits	market value	City, state	Telephone
Bytex	o	BYTX	189	155	144	167	Southborough, MA	508-480-0840
Cabletron Systems	n	CS	2	77	24	20	East Rochester, NH	603-332-9400
Cadence Design Systems	n	CDN	56	58	12	24	San Jose, CA	408-943-1234
Caere	o	CAER	148	183	138	110	Los Gatos, CA	408-395-7000
Calgon Carbon	o	CRBN	39	21	10	12	Pittsburgh, PA	412-787-6700
Century Telephone Enterprises	n	CTL	176	33	23	11	Monroe, LA	318-388-9500
Cerner	o	CERN	120	138	175	186	Kansas City, MO	816-221-1024
Chambers Development	a	CDVB	133	36	17	4	Pittsburgh, PA	412-242-6237
Chili's	n	EAT	141	1	45	36	Dallas, TX	214-980-9917
Cintas	o	CTAS	113	10	21	15	Cincinnati, OH	513-489-4000
Cisco Systems	o	CSCO	15	125	67	39	Menlo Park, CA	415-326-1941
Colonial Cos	o	CLACB	177	12	19	48	Columbia, SC	803-798-7000
Comair Holdings	o	COMR	165	64	68	98	Cincinnati, OH	606-525-2550
Comshare	o	CSRE	188	96	114	118	Ann Arbor, MI	313-994-4800
Concord Computing	o	CEFT	52	162	145	124	Memphis, TN	901-371-8000
Consilium	o	CSIM	151	171	135	96	Mountain View, CA	415-691-6100
CPAC	o	CPAK	92	178	197	197	Leicester, NY	716-382-3223
Cracker Barrel Old Country Store	o	CBRL	183	37	58	38	Lebanon, TN	615-444-5533
Crown Books	o	CRWN	168	40	82	121	Landover, MD	301-731-1200
CSS Industries	a	CSS	31	74	60	122	Philadelphia, PA	215-569-9900
DFSoutheastern	o	DFSE	196	26	72	178	Decatur, GA	404-371-4000
DH Technology	o	DHTK	59	153	115	172	San Diego, CA	619-451-3485
Diagnostic Products	n	DP	71	128	48	28	Los Angeles, CA	213-776-0180
Digi Intl	o	DGII	5	191	152	156	Minneapolis, MN	612-922-8055
Digital Microwave	o	DMIC	73	83	71	74	San Jose, CA	408-943-0777
Digital Systems	o	DGTL	66	175	134	107	Redmond, WA	206-881-7544
Duty Free Intl	o	DFII	77	103	74	52	Ridgefield, CT	203-431-6057
Dycom Inds	n	DY	97	67	93	88	West Palm Beach, FL	407-659-6301
Ecology & Environment	a	EEI	181	121	146	153	Lancaster, NY	716-684-8060
Electronic Arts	o	ERTS	67	117	118	126	San Mateo, CA	415-571-7171
EnClean	o	ENCL	122	144	189	155	Alvin, TX	713-331-8335
Expeditors Intl Wash	o	EXPD	62	50	92	105	Seattle, WA	206-246-3711
Fastenal	o	FAST	41	149	130	60	Winona, MN	507-454-5374
Fidelity National Financial	a	FNF	166	57	124	176	Irvine, CA	714-852-9770
FirstFed Financial	n	FED	124	20	25	89	Santa Monica, CA	213-319-6000
Fiserv	o	FISV	179	59	73	56	West Allis, WI	414-546-5000
FlightSafety Intl	n	FSI	95	24	3	1	Flushing, NY	718-565-4100
FlowMole	o	MOLE	146	156	161	166	Kent, WA	206-395-0200
Forest Labs	a	FRX	184	71	14	8	New York, NY	212-421-7850
Forschner Group	o	FSNR	14	150	173	191	Shelton, CT	203-929-6391
Franklin Resources	n	BEN	4	13	2	5	San Mateo, CA	415-378-2000
Frederick's of Hollywood	a	FHO	194	104	154	151	Los Angeles, CA	213-466-5151

a: American Stock Exchange. n: New York Stock Exchange. o: over-the-counter.

Company Directory

Company	Exch	Ticker symbol	Where they rank: 5-year average ROE	sales	profits	market value	City, state	Telephone
Frontier Insurance Group	o	FRTR	46	116	84	111	Monticello, NY	914-796-2100
G&K Services	o	GKSRA	142	84	87	86	Minneapolis, MN	612-546-7440
Gainsco	a	GNA	104	154	126	164	Fort Worth, TX	817-483-0007
Gendex	o	XRAY	106	170	182	169	Milwaukee, WI	414-769-2888
Geodynamics	o	GDYN	143	140	163	185	Santa Barbara, CA	805-964-9905
Gish Biomedical	o	GISH	182	192	195	179	Santa Ana, CA	714-261-1330
Goal Systems	o	GOAL	27	114	79	59	Columbus, OH	614-888-1775
Good Guys	o	GGUY	171	18	113	120	San Francisco, CA	415-885-2121
Graco	n	GGG	78	9	56	84	Minneapolis, MN	612-623-6000
Greenery Rehabilitation Group	n	GRG	87	106	111	125	Cambridge, MA	617-244-4744
Group 1 Software	o	GSOF	24	189	177	189	Greenbelt, MD	301-982-2000
GZA GeoEnvironmental Tech	o	GZEA	94	165	181	188	Newton Upper Falls, MA	617-969-0700
Harding Associates	o	HRDG	129	123	141	127	Novato, CA	415-892-0821
Harleysville Group	o	HGIC	172	3	32	92	Harleysville, PA	215-256-5000
HealthCare Compare	o	HCCC	127	163	174	93	Downers Grove, IL	708-719-9000
Healthcare Svcs Group	o	HCSG	197	135	143	108	Huntington Valley, PA	215-938-1661
Heartland Express	o	HTLD	23	141	117	115	Coralville, IA	319-645-2728
Hipotronics	a	HIP	45	179	170	177	Brewster, NY	914-279-8091
Home Nutritional Svcs	o	HNSI	26	122	104	79	Parsippany, NJ	201-515-4900
Hooper Holmes	a	HH	152	110	180	182	Basking Ridge, NJ	201-766-5000
Integrated Systems	o	INTS	21	194	179	132	Santa Clara, CA	408-980-1500
International Aluminum	n	IAL	167	41	62	103	Monterey Park, CA	213-264-1670
International Dairy Queen	o	INDQA	11	14	26	23	Minneapolis, MN	612-830-0200
International Recovery	n	INT	72	66	150	148	Miami Springs, FL	305-884-2001
Intertrans	o	ITRN	118	87	132	136	Irving, TX	214-929-8888
IPL Systems	o	IPLSA	114	187	160	158	Waltham, MA	617-890-6620
JLG Industries	o	JLGI	136	75	102	160	McConnellsburg, PA	717-485-5161
Johnson Worldwide Assocs	o	JWAIA	47	17	52	63	Racine, WI	414-631-2100
Jones Medical Inds	o	JMED	89	193	187	150	St Louis, MO	314-432-7557
Juno Lighting	o	JUNO	44	112	66	82	Des Plaines, IL	708-827-9880
Kaydon	o	KDON	20	68	31	42	Muskegon, MI	616-755-3741
Keane	a	KEA	63	108	151	137	Boston, MA	617-241-9200
Kent Electronics	n	KNT	175	142	172	168	Houston, TX	713-780-7770
Lawson Products	o	LAWS	49	56	34	30	Des Plaines, IL	708-827-9666
Lechters	o	LECH	79	65	95	112	Harrison, NJ	201-481-1100
Legent	o	LGNT	82	70	18	27	Vienna, VA	703-734-9494
Lindal Cedar Homes	o	LNDL	58	147	190	198	Seattle, WA	206-725-0900
Lindsay Manufacturing	o	LINZ	12	102	106	159	Lindsay, NE	402-428-2131
Linear Technology	o	LLTC	185	119	80	69	Milpitas, CA	408-432-1900
Liqui-Box	o	LIQB	54	89	90	85	Worthington, OH	614-888-9280
Luby's Cafeterias	n	LUB	93	7	16	21	San Antonio, TX	512-654-9000
MacNeal-Schwendler	a	MNS	42	146	88	117	Los Angeles, CA	213-258-9111

a: American Stock Exchange. n: New York Stock Exchange. o: over-the-counter.

Company Directory

Company	Exch	Ticker symbol	Where they rank: 5-year average ROE	sales	profits	market value	City, state	Telephone
Maxim Integrated Products	o	MXIM	157	137	108	102	Sunnyvale, CA	408-737-7600
MBIA	n	MBI	180	48	1	9	Armonk, NY	914-273-4545
McGrath RentCorp	o	MGRC	84	151	103	116	San Lorenzo, CA	415-276-2626
Medex	o	MDEX	163	152	157	128	Hilliard, OH	614-876-2413
Medicine Shoppe Intl	o	MSII	103	168	101	71	St Louis, MO	314-993-6000
Medstat Systems	o	MDST	86	197	199	187	Ann Arbor, MI	313-996-1180
Melamine Chemicals	o	MTWO	1	159	107	157	Donaldsonville, LA	504-473-3121
Mentor	o	MNTR	98	139	99	73	Goleta, CA	805-967-3451
Mestek	n	MCC	64	54	96	152	Westfield, MA	413-568-9571
Met-Pro	a	MPR	170	158	168	162	Harleysville, PA	215-723-6751
Micro Healthsystems	o	MCHS	164	199	200	184	West Orange, NJ	201-731-9252
Modern Controls	o	MOCO	65	198	184	165	Minneapolis, MN	612-560-2900
MS Carriers	o	MSCA	107	92	100	147	Memphis, TN	901-332-2500
Myers Industries	a	MYE	134	47	85	100	Akron, OH	216-253-5592
National Pizza	o	PIZA	69	35	57	43	Pittsburg, KS	316-231-3390
Nellcor	o	NELL	138	76	64	72	Hayward, CA	415-887-5858
New England Critical Care	o	NECC	200	95	86	41	Westborough, MA	508-836-3610
New Line Cinema	a	NLN	101	91	123	139	New York, NY	212-239-8880
Nichols Institute	a	LAB	192	73	121	57	San Juan Capistrano, CA	714-661-8000
Nichols Research	o	NRES	108	120	162	183	Huntsville, AL	205-883-1140
NYMagic	o	NYMG	111	107	42	55	New York, NY	212-953-0580
OEA	a	OEA	186	118	98	54	Denver, CO	303-693-1248
Oregon Steel Mills	n	OS	130	19	30	40	Portland, OR	503-286-9651
Oshkosh B'Gosh	o	GOSHA	28	6	11	34	Oshkosh, WI	414-231-8800
Pansophic Systems	n	PNS	119	34	20	62	Lisle, IL	708-505-6000
Payco American	o	PAYC	147	97	142	94	Brookfield, WI	414-784-9035
Penn Treaty American	o	PTAC	70	160	133	171	Allentown, PA	215-965-2222
Pioneer Group	o	PIOG	38	132	55	97	Boston, MA	617-742-7825
Policy Mgmt Sys	n	PMS	187	8	13	13	Columbia, SC	803-735-4000
Preferred Health Care	a	PY	32	172	153	109	Wilton, CT	203-762-0993
Quaker Chemical	o	QCHM	161	52	76	87	Conshohocken, PA	215-828-4250
Raven Industries	a	RAV	173	109	147	174	Sioux Falls, SD	605-336-2750
Raymond James Financial	n	RJF	153	23	47	114	St Petersburg, FL	813-573-3800
Respironics	o	RESP	35	184	186	154	Murrysville, PA	412-373-8114
Rollins Environmental Svcs	n	REN	83	51	28	19	Wilmington, DE	302-479-3455
Ryan's Family Steak Houses	o	RYAN	112	22	33	37	Greer, SC	803-879-1000
SafeCard Services	n	SSI	22	82	29	65	Fort Lauderdale, FL	305-776-2500
Sage Software	o	SGSI	195	176	167	138	Rockville, MD	301-230-3200
St Jude Medical	o	STJM	50	69	6	2	St Paul, MN	612-483-2000
Sanford	o	SANF	36	79	35	32	Bellwood, IL	708-547-6650
Sbarro	a	SBA	99	63	49	35	Commack, NY	516-864-0200
Sealright	o	SRCO	40	49	59	58	Kansas City, MO	816-926-2000

a: American Stock Exchange. n: New York Stock Exchange. o: over-the-counter.

Company Directory

Company	Exch	Ticker symbol	Where they rank: 5-year average ROE	sales	profits	market value	City, state	Telephone
Seattle FilmWorks	o	FOTO	10	166	191	200	Seattle, WA	206-281-1390
Selas	a	SLS	198	129	149	181	Dresher, PA	215-646-6600
Sierra On-Line	o	SIER	19	169	136	161	Coarsegold, CA	209-683-4468
Software Publishing	o	SPCO	60	81	41	53	Mountain View, CA	415-962-8910
Solectron	o	SLTN	137	44	110	146	San Jose, CA	408-942-1943
Southern Mineral	o	SMIN	61	196	122	195	Houston, TX	713-872-7621
Spaghetti Warehouse	a	SWH	140	161	178	149	Garland, TX	214-226-6000
LS Starrett	n	SCX	139	45	43	123	Athol, MA	508-249-3551
Structural Dynamics Research	o	SDRC	158	93	76	49	Milford, OH	513-576-2400
Stryker	o	STRY	115	28	39	17	Kalamazoo, MI	616-385-2600
Sullivan Dental Products	o	SULL	9	157	192	145	West Allis, WI	414-321-8881
SunGard Data Systems	o	SNDT	144	38	44	46	Wayne, PA	215-341-8700
Superior Industries Intl	n	SUP	81	27	50	77	Van Nuys, CA	818-781-4973
Synetic	o	SNTC	145	181	158	90	Fair Lawn, NJ	201-703-0500
System Software Assocs	o	SSAX	33	90	61	61	Chicago, IL	312-641-2900
T2 Medical	o	TSQM	8	136	75	45	Alpharetta, GA	404-442-2160
Tech-Ops Landauer	a	TO	6	182	119	95	Glenwood, IL	708-755-7000
Tech-Ops Sevcon	a	TOC	116	195	196	199	Boston, MA	617-523-2030
Technalysis	o	TECN	29	188	188	194	Minneapolis, MN	612-925-5900
Tennant	o	TANT	128	43	53	76	Minneapolis, MN	612-540-1200
Thermo Instrument Sys	a	THI	123	60	65	31	Waltham, MA	617-622-1000
Tootsie Roll Industries	n	TR	90	55	40	29	Chicago, IL	312-838-3400
Total System Services	n	TSS	53	124	77	16	Columbus, GA	404-649-2204
Trans World Music	o	TWMC	30	5	51	64	Albany, NY	518-452-1242
TriCare	o	TRCR	102	180	194	193	Santa Ana, CA	714-250-1999
Tuscarora Plastics	o	TUSC	125	111	137	140	New Brighton, PA	412-843-8200
UniCare Financial	a	UFN	159	113	105	134	Irvine, CA	714-955-2170
Unifirst	n	UNF	162	39	69	68	Wilmington, MA	508-658-8888
United Investors Mgmt	n	UTD	154	29	5	14	Birmingham, AL	205-325-4200
Uno Restaurant	a	UNO	155	143	166	131	West Roxbury, MA	617-323-9200
Utah Medical Products	o	UTMD	57	190	169	133	Midvale, UT	801-566-1200
Vallen	o	VALN	156	78	116	99	Houston, TX	713-462-8700
Value Merchants	o	VLMR	80	100	159	142	Milwaukee, WI	414-274-2575
Vencor	o	VCOR	85	131	198	130	Louisville, KY	502-569-7300
Vertex Communications	o	VTEX	191	167	193	196	Kilgore, TX	214-984-0555
Vicor	o	VICR	126	173	176	101	Andover, MA	508-470-2900
Washington Fed Savings & Loan	o	WFSL	55	16	4	18	Seattle, WA	206-624-7930
Watts Industries	o	WATTA	135	11	22	22	North Andover, MA	508-688-1811
Weigh-Tronix	o	WGHT	169	134	171	175	Fairmont, MN	507-238-4461
Werner Enterprises	o	WERN	121	15	46	83	Omaha, NE	402-895-6640
Western Waste Inds	o	WWIN	193	61	91	51	Carson, CA	213-329-1425
Williams-Sonoma	o	WSGC	100	31	94	67	San Francisco, CA	415-421-7900

a: American Stock Exchange. n: New York Stock Exchange. o: over-the-counter

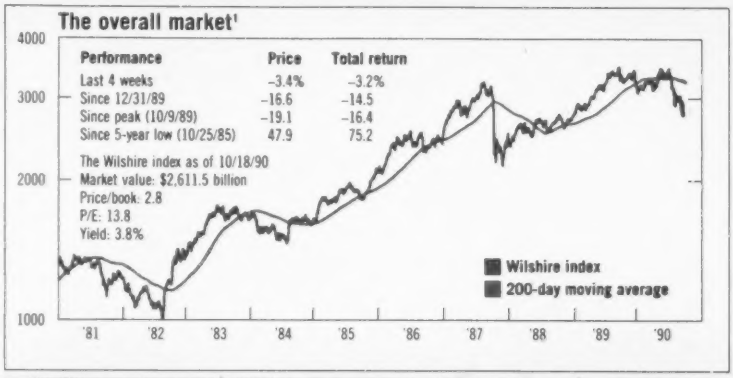
The Forbes Wall Street Review

By Eric S. Hardy

With the market down 15% since the beginning of August, most people are reluctant to admit they're buying stocks. But corporate insiders are compelled by law to report changes in their holdings. What are they doing? Buying aggressively, according to Norman Fosback, president and editor of *The Insiders*, a biweekly investment newsletter that makes recommendations based on insider transactions. Fosback reports that "three out of four insiders executing open market trades in their companies' stock are buyers." Typically, fewer than half the transactions of this type are on the buy side.

Fosback is also encouraged by a recent increase in another insider activity: stock-buyback programs, especially at larger corporations such as Union Carbide, Schering-Plough and Federal National Mortgage Association. These developments have pushed up Fosback's indicators to their most positive level since November 1987, just after the crash.

During the past two weeks insurance issues were especially hard hit. The group was hurt when Travelers Corp. announced a significant write-down of its real estate portfolio and cut its dividend by one-third. Stock of the Hartford-based insurance giant fell by more than 35%, to a 12-year low. Provident Life & Accident and Lincoln National each lost about one-fourth of their value.



The Best Performing Stocks

Company	Price	2-week change	P/E	Avg vol (thou)[2]	Rel vol[3]
Sun Microsystems	22⅛	20%	19	15,756	1.2
Occidental Petroleum	21¼	17	22	8,007	1.1
Conner Peripherals	19⅜	16	12	8,848	0.7
NL Industries	12⅛	15	5	1,654	3.2
Limited	14¼	13	14	10,872	1.2

The Worst Performing Stocks

Company	Price	2-week change	P/E	Avg vol (thou)[2]	Rel vol[3]
Travelers	13⅛	-36%	3	10,196	4.0
USF&G	11⅛	-33	8	4,968	1.8
Polaroid	22½	-32	11	4,493	2.7
ITEL	8⅛	-29	18	2,147	3.0
Federal Home Loan	37⅛	-28	6	4,246	1.9

Closeup on the Market

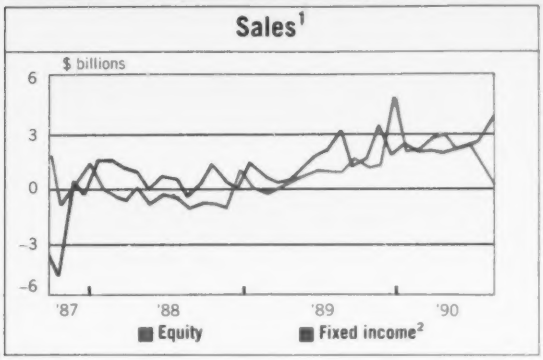
Index or investment	Price	2-week change
Wilshire index 6,000 stocks, capitalization weighted	2,850.75	-2.9%
Wilshire index 6,000 stocks, equal weighted	16.43	-5.1
Dow Jones industrials 30 stocks, divisor-adjusted price average	2,452.72	-2.5
S&P 500 Capitalization weighted cross section, major stocks	305.74	-2.2
NYSE Capitalization weighted, all listed common stocks	167.13	-2.5
Amex Capitalization weighted total return: stocks, warrants	291.84	-5.3
Nasdaq Capitalization weighted, all issues except warrants	334.03	-4.5
Amex international market index Capitalization weighted, 50 largest ADRs	308.34	3.6

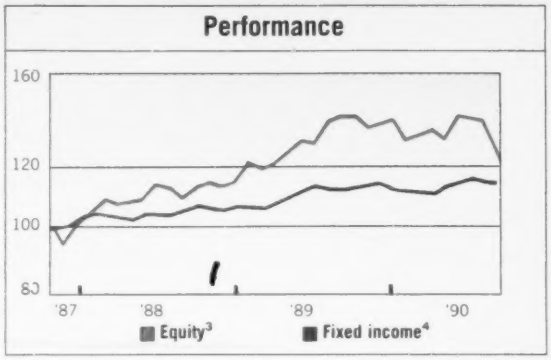
Index or investment	Price or rate	2-week change
Europe, Australia, New Zealand and Far East[4] (EAFE) a dollar denominated capitalization weighted index	838.60	9.0%
Institutional[5] Approximately 200 stocks with high institutional ownership	85.38	-3.8
Individual[5] Approximately 200 stocks with low institutional ownership	82.49	-3.4
Russell 2000 index 2000 stocks with small market values, capitalization weighted	120.86	-5.4
Gold[6] (composite quote of 6 major dealers)	$371.20	-5.5
Yen[6] (per $U.S.)	124.45	-6.9
Commodity index[6] (CRB futures index, 1967 = 100)	231.02	-3.6
Oil[6] (W Texas Intermediate)	$36.80	-0.4
T bills[6] (90 days)	7.25%	13 basis points[7]
Broker loan rate[6]	9.25%	unchanged

Note: All data for periods ending 10/18/90. Wilshire index reflects price performance. It differs slightly from market value of outstanding stocks because of retirements of equity since index was created. Stocks listed above have market capitalizations of $500 million or more. [1]Capitalization weighted, prepared by Wilshire Associates, Santa Monica, Calif. [2]Average daily volume over a 2-week period. [3]Average daily volume over the last 2 weeks, divided by the average daily volume over the preceding 3 months. [4]Morgan Stanley Capital International Perspective. [5]For period ending 10/19/90. A. Arbel, Cornell University, using Ford Database from Ford Investor Services. [6]Knight-Ridder Financial Information. [7]A basis point is equal to one-hundredth of a percentage point.

Mutual Fund Review

By John Chamberlain





For once, fund buyers had their timing right. Weeks before Iraqi troops rolled into Kuwait, investors cooled to equity mutual funds. According to the Investment Co. Institute, net sales of equity funds (new purchases and reinvested income dividends less redemptions) dropped sharply, from $2.7 billion in June to $1.6 billion in July. This figure fell to $566 million for August. Bond funds, meanwhile, increased their net sales from $2.6 billion in July to $3.7 billion in August.

The Wilshire index is now selling for 14 times latest-12-month earnings. Some big, cyclical companies—including Alcoa and Ford Motor—have P/E multiples under 8. Mutual funds with low average P/E ratios offer a diversified way to invest in such stocks as well as in low-growth, defensive stocks. Although the low-P/E funds listed below have not kept pace with the market since the November 1987 bottom, they would probably outperform aggressive funds in a more bearish period. The performance cycle includes a bull phase (Nov. 30, 1987 to May 31, 1990) and a bear phase (May 31 to Sept. 30). Over the full cycle, as it happened, the best performers were sector funds specializing in energy and health care stocks *(see table below)*. For comparison purposes, the S&P 500 had an annual return (including dividends) of 14.5% during this period.

The Cheapest Funds

Fund	Forbes rating UP	Forbes rating DOWN	Cycle[6] return	P/E
Equity funds ranked on price-to-earnings ratio				
Seligman Income Fund	D	B	5.2%	9
Century Shares Trust	C	B	10.8	9
Franklin Equity Fund	B	C	11.2	10
Vanguard Wellesley Income	D	A	11.3	11
Franklin Income	D	A	4.3	12
Templeton Global Fund	C	B	10.1	12
Pioneer Three	C	C	12.1	12
Putnam Convertible Income	B	D	6.9	12
Safeco Income Fund	D	A	8.3	12
Merrill Lynch Basic Value A	B	B	9.0	12
Putnam Fund Growth/Income	C	A	13.6	12
Guardian Park Ave	A	B	11.7	12
Washington Mutual Investors	B	B	12.0	12
Delaware Group Decatur I	C	B	8.4	12
United Continental Income	A	D	9.6	12
Templeton Growth Fund	C	A	12.6	13

The Best Performers

Fund	Forbes rating UP	Forbes rating DOWN	Cycle[6] return	Assets[7] ($mil)
Equity[5]				
Mexico Fund	A+	A+	49.3%	$297
Financial Strategic-Health	A	C	33.2	88
Vanguard Special-Energy	A	B	27.5	102
Equity Strategies Fund	B	B	25.9	69
Fidelity Select-Energy	D	A	25.3	86
Financial Strategic-Energy	B	B	24.0	12
Hartwell Emerging Growth	A+	F	23.4	29
Vanguard Spec-Health Care	A	B	23.2	134
Fidelity Select-Health Care	A+	D	22.7	292
GT Global Growth-Pacific	A	C	21.9	265
Taxable Bonds				
Lincoln National Income	C	A+	13.9	68
Transamerica Income Shares	A+	D	13.1	119
Mutual of Omaha Interest	A	C	13.0	95
Fund For US Govt Secs	B	D	12.6	1,048
Federated Income Trust	B	B	12.4	974

Note: To be rated, equity funds must be in existence since 7/31/84; bond funds, 9/30/81. [1]Monthly net sales of open-end funds. Net sales are purchases by investors, including reinvested dividends, less redemptions. [2]Includes tax-free and foreign bond funds. Source: Investment Co. Institute. [3] Index of total return for the 25 largest stock funds in 1986. [4]Index of total return for the 25 largest taxable bond funds in 1986. [5]Includes balanced funds. [6]Total return (annualized), for one market cycle: equity, 11/30/87 to 9/30/90; bonds, 5/31/84 to 9/30/90. [7]As of 6/30/90.